

### VOLUME-III

1	<b><u>ANNEXURE R-21</u></b> A true copy of the Extract of the Report dt. Nil February 2014	492-596
2	<b><u>ANNEXURE R-22</u></b> A true copy of the Demographic Data Standards and Verification procedure (DDSVP) committee Report	597-639
3	<b><u>ANNEXURE R-23(COLLY)</u></b> (i) A true copy of the Office Memorandum No. 60/18/74-Estt(A) (ii) A true copy of the Office Memorandum No. 28034/8/74-Estt(A) (iii) A true copy of the Office Memorandum No.28034/10/75-Estt(A) (iv) A true copy of the Office Memorandum No.28034/3/82-Ests(A) (v) A true copy of the Office Memorandum No. 13/11/86-JCA (vi) A true copy of the Office Memorandum No. 34/6/91-Ad-III	640-643 644-648 649-650 651-652 653-656 657-659
4	<b><u>ANNEXURE R-24</u></b> A true copy of the Extract of the Awareness and communication report-Communicating to a Billion	660-680
5.	<b><u>I.A. No. of 2014</u></b> An application for condonation of delay in filing the Counter affidavit with affidavit	681-685

Annexure R-21

492

TARGETED PUBLIC  
DISTRIBUTION SYSTEM  
BEST PRACTICE SOLUTION  
FEBRUARY 2014

\WFP

WORLD FOOD PROGRAMME

## Table of Contents

1.	Introduction	5
2.	Solution Design Approach	9
3.	Recommended Best Practice Solution	11
4.	Implementation Plan	31
5.	Financial Feasibility	33
6.	Conclusion	38

# List of Abbreviations and Terms used in this Document

AAY :	Antyodaya Anna Yojana
APL :	Above Poverty Line
BCG :	Boston Consulting Group
BPL :	Below Poverty Line
COREPDS :	Centralised      Online      Real-Time Electronic Public Distribution System
DBT :	Direct Benefit Transfer
DFPD :	Department of Food and Public Distribution
EPIC :	Elector Photo Identity Card
FPS :	Fair Price Shop/s
GPS :	Global Positioning System
ID :	Identification Document
IT :	Information Technology
MIS :	Management Information System
MOU :	Memorandum of Understanding
NIC :	National Informatics Centre
NFSA (2013) :	National Food Security Act, 2013
NPR :	National Population Register

PDS :	Public Distribution System
PoS :	Point of Sale
Rs :	Rupees (60 Indian Rupees are roughly equivalent to 1 USD; all currency conversions in this document were done based on this rate)
SECC :	Socio - Economic Caste Census
SMS :	Short Messaging Service
TPDS :	Targeted Public Distribution System
UIDAI :	Unique Identification Authority of India
USD :	United States Dollars
VSAT :	Very Small Aperture Terminal
WiMAX :	Worldwide Interoperability for Microwave Access
Crore :	One crore is equivalent to 10 million
Lakh :	One lakh is equivalent to 100,000

## 1. Introduction

### 1.1 BACKGROUND

India's Targeted Public Distribution System (TPDS) is one of the world's largest food security schemes. The TPDS was created in 1997 by modifying the previously universal Public Distribution System (PDS) to improve the targeting of subsidies to people that need them the most. Beneficiaries were identified as being Below Poverty Line (BPL) or Above Poverty Line (APL), with each group entitled to the same food grains but at differing quantity and sale price. In 2000, additional classification of Antyodaya Anna Yojana (AAY) out of BPL families was included to provide dedicated food grain allotments at highly subsidised prices to the poorest of the poor. The TPDS currently serves 6.52 crore (65.2 million) BPL families including 2.5 crore (25 million) AAY families, as well as 11.5 crore (115 million) APL families<sup>1</sup>; these numbers will change post the implementation of the National Food Security Act, 2013 (NFSA (2013))<sup>2</sup>.

As is the case with many initiatives of this size and complexity, the TPDS has had mixed success in achieving its intended goals. There is significant variation in the performance of the TPDS across the country. On the whole, the TPDS is in need of strengthening to ensure that it provides its beneficiaries with the food security that was originally envisaged under the scheme. According to evaluation studies on the functioning of the TPDS, there are leakages or diversions of food grains and the TPDS subsidy does not reach all intended beneficiaries. Leakages or diversion of food grains from the system stems from issues in beneficiary identification as well as from a lack of transparency in the system that makes it possible to show issuance of food grains to beneficiaries even in cases when this may not be occurring.

A few states have made efforts to address these problems with varying degrees of success. The Central Vigilance Committee chaired by Justice

D.P. Wadhwa has also made a number of valuable recommendations<sup>3</sup> to the Supreme Court of India, based on its review of different state TPDS operations over the past few years. These recommendations form the basis of the September 2011 rulings of the Supreme Court<sup>4</sup> on the computerization of the TPDS which have been a significant driver of computerisation efforts throughout the country in recent years. However, the majority of state efforts on the TPDS are in the form of pilot projects that are at a relatively small scale. Information on the broader applicability of these pilots and the potential for their success in other parts of the country is currently limited.

The NFSA, passed by the Parliament in September 2013 and the potential expansion and adaptation of Direct Benefit Transfer (DBT) to the TPDS at some point in the future, will require significant changes to the design and operations of the TPDS.



The NFSA (2013) seeks to address the issue of food security by combining the benefits of the three largest food safety nets programmes, namely the TPDS - targeting the food insecure poor population; the Mid-Day-Meal Scheme - a school feeding programme targeting children in the age group of six to 14 years; and the Integrated Child Development Services - a supplementary feeding programme targeting pregnant and lactating women and children below the age of six. The NFSA (2013) gives up to 50% of the urban and 75% of the rural population the legally enforceable right to state food benefits under the TPDS. The TPDS is by far the largest of the three foodbased safety nets under the NFSA (2013) and serves over 800 million people across India.

The past few years have seen a number of trends in the enabling environment for the TPDS. An expansion in rural infrastructure has brought electricity and data connectivity to more than 90% of India's villages<sup>6</sup>. The Unique Identification

Authority of India (UIDAI) has biometrically enrolled more than 56 crore (560 million) Indians and is on track to enrol the entire country's population and give each person a unique Aadhaar ID number<sup>7</sup>. The increasing scale of hardware and software implementations in the TPDS has helped to refine equipment specification and has reduced equipment costs in addition to creating a cadre of vendors and suppliers (in government and in the private sector) with valuable implementation experience in the sector. The Government of India has adopted a number of measures to strengthen the TPDS including a revised Citizen's Charter in 2007 and the PDS (Control) Order in 2001. To guide implementation of the NFSA (2013) and the TPDS reforms enlisted therein, the PDS Control order is currently being modified. In addition, Rs. 884 crore (USD 147 million) have been allocated on cost sharing basis in the 12th Five Year Plan for Component 1 of the scheme for the end to end computerisation of the TPDS (covering digitisation

of beneficiary databases, computerisation of supply chain management, setting up of transparency portals and grievance redressal mechanisms).

In light of the factors mentioned above, there is not only an urgent imperative for the large scale modernisation of the TPDS but also a great opportunity to affect significant change by leveraging recent advances in technology and infrastructure. A systematic study of different TPDS efforts all throughout the country is required to identify best practices in system design and implementation that can be used by governments as they consider efforts to strengthen the TPDS in their respective states.

## 1.2 WFP'S ASSOCIATION WITH TPDS

The United Nations World Food Programme (WFP) has been in India since 1963. Over the years, in keeping with India's changing needs, WFP has transitioned its operations in India from the direct

provision of food aid to a more partnership and advisory oriented role. Today, WFP focuses its efforts on leveraging its experience in India as well as its global expertise to help the government solve their most pressing food security and nutrition issues. WFP's goal in India is to support the government's food based safety nets by suggesting ways to improve their effectiveness in order to address existing levels of malnutrition and food insecurity in the country.

Over the past several years, WFP has been actively working on strengthening the TPDS through in-depth analysis of TPDS vis-à-vis food security across the country, undertaking pilot projects as well as diagnostic studies and workshops. In 2007, WFP carried out a diagnostic and solution design exercise to identify measures that could be taken to increase TPDS effectiveness. In 2008, the lessons from this effort were used to design a pilot project implemented by WFP in collaboration with the

Government of Odisha in Rayagada district of the state.

The TPDS project in Rayagada was designed with the objective of testing the suitability of a number of potential TPDS solutions that were being proposed at the time. The project focused on tackling the issues of upfront beneficiary identification and regular ongoing authentication in a challenging operating environment characterised by significant infrastructure challenges (poor data and road connectivity as well as a lack of electricity and suitable venues) in addition to weather and security related issues. In a pre-Aadhaar world, the Rayagada project was one of the first TPDS projects to enrol multimodal biometrics including ten fingerprints, iris (for a segment of the population) and individual facial photographs for beneficiaries across the district. Fingerprints were used for biometric de-duplication and for authentication of beneficiaries during transactions at a number of

FPS using a smart card based Point of Sale (PoS) system.

A number of key solution elements that were tested as part of the Rayagada project include:

- Digitisation of beneficiary lists from ration card registers and existing beneficiary surveys (a mix of English and Oriya language data sources)
- Biometric enrolment of the entire population of the district (10 fingerprints and facial photos for approximately 10 lakh (1 million) people, with iris also scanned for a subset of the population)
- Smart Card solution with chip containing biometrics for authentication (real-time transfer of data)
- Plastic barcoded cards with biometrics on the PoS device for biometric authentication (real time transfer of data)

- Barcoded coupons collected and scanned to upload transactions on Management Information System (MIS) (without PoS)
- Automated allocation based on MIS data on previous month's off-take

The Rayagada project has provided WFP with invaluable insight and operational experience in implementing a variety of TPDS solutions. During the project, WFP identified a number of challenges associated with beneficiary list digitization and biometric enrolment as well as best practices to overcome them. The biometric based de-duplication process conducted for the entire biometrically enrolled population of the district identified and removed about 10 percent duplicates. Barcoded coupon and smart card based transaction systems were thoroughly evaluated and the associated costs, timelines, complexities and benefits were compared. The need for incentives to improve FPS viability, constant training and support for all

stakeholders and the value of a well designed user-friendly MIS was clearly observed. The project highlighted the importance of close collaboration between the different implementation partners, including different levels of government. It also underlined the need for a well thought out plan to manage a relatively seamless transition to the new system and that the existence of strong exception handling and grievance redressal mechanisms is critical for any technological project to be successful.

The project was implemented in 370 FPS including rural blocks with barcoded coupons. Today, 33 FPS in three urban local bodies and six rural locations of Rayagada are operating PoS machines that biometrically authenticate beneficiaries using their TPDS smart cards and send transaction reports online to a web based MIS. The project was appreciated by the Government of Odisha for state-wide replication.



In keeping with its goal to support and empower governments in making their TPDS efforts sustainable, WFP transitioned full responsibility for the day-to-day operations of the Rayagada project to the Government of Odisha in December 2013.

This project has provided WFP with immense learning and a unique opportunity to share the experiences and build on the successes to guide the scale-up of TPDS computerisation.

### 1.3 CONTEXT OF THE PROJECT

In April 2012, WFP further consolidated its commitment to strengthen the TPDS by signing a Memorandum of Understanding (MoU) with The Department of Food and Public Distribution (DFPD), Ministry of Consumer Affairs, Food and Public Distribution. As part of this partnership, WFP and the Department of Food and Public Distribution co-organised a 'National Cross Learning Workshop' in May 2012 to give different states an opportunity to

share best practices in the TPDS and in food fortification across the country.

WFP proposed a study to identify the best practices in the TPDS throughout the country in order to create a comprehensive TPDS Best Practice Solution<sup>8</sup> that could be shared with different states that were looking to implement TPDS solutions. This effort was envisaged as a means of bringing more clarity to the requirements and benefits of different potential TPDS solutions in an attempt to accelerate the pace of TPDS reforms.

A team from WFP and The Boston Consulting Group (BCG) conducted the above mentioned study from November 2012 – February 2013. As part of this effort, the team studied TPDS pilot projects in eight states (including detailed site visits to six pilots). A variety of key TPDS stakeholders including central and state governments, beneficiaries, FPS operators, solution providers, academics and NGOs were consulted throughout the solution design process.

This document outlines the recommended TPDS Best Practice Solution resulting from the process outlined above and provides an overview of the solution features and implementation plans. WFP hopes that state governments will find this document useful in identifying the most suitable set of solutions to strengthen their TPDS. WFP would be happy to discuss ways in which they can support in TPDS reform efforts.

## 2. Solutions Design approach

A systematic approach was used to study the issues faced by the TPDS and to evaluate the suitability of the various solutions currently being proposed, in order to create a TPDS Best Practice Solution.

### 2.1 IDENTIFICATION OF KEY ISSUES FACED BY THE TPDS

The key issues faced by the TPDS were identified to serve as the basis for the solution design exercise:

- Improper targeting and identification of beneficiaries including categorisation

- Static/ slow changing nature of beneficiary lists
- Leakage in supply chain operations due to poor tracking of stock
- Leakage at FPS due to misreporting of sales
- Poor viability of FPS
- Lack of transparency on TPDS operations to officials and beneficiaries alike
- Insufficient means of grievance redressal leading to beneficiary disempowerment

## 2.2 Definition Of Overall System Design Objectives

The following objectives were defined to guide the TPDS solution design process:

- Proper targeting of subsidy – Ensure that deserving beneficiaries get rations according to their proper entitlement
- Leakage reduction – Reduce pilferage and diversion of food grains throughout the TPDS value chain; deploy a portion of savings to improving nutrition

- Improved stakeholder convenience –Reduce system complexity and increase ease of operations; create solution buy-in and support from consumers as well as other internal stakeholders

### 2.3 BENCHMARKING OF EXISTING TPDS PILOT PROJECTS TO IDENTIFY DIFFERENT SOLUTION OPTIONS

In consultation with the Department of Food and Public Distribution, eight state TPDS pilot projects covering a broad variety of different technological solutions, implementation models and operating conditions were identified for a detailed study. The study team visited Andhra Pradesh, Chandigarh, Chhattisgarh, Gujarat, Karnataka and Odisha and interacted with a broad cross section of stakeholders across the entire TPDS value chain in each state. Specific elements of the TPDS in Haryana and Tamil Nadu were also studied in detail. A comprehensive set of processes and solution options for each segment of the TPDS

value chain was assembled for analysis on the basis of the benchmarking exercise.

#### 2.4 SELECTION OF THE MOST SUITABLE SOLUTION OPTIONS FOR EACH PROCESS IN THE TPDS VALUE CHAIN TO CREATE THE BEST PRACTICE SOLUTION

The TPDS value chain was divided into four main segments for the purpose of solution design:

- Beneficiary identification and enrolment
- Supply chain operations
- FPS transactions
- Grievance redressal

For every process under each of the four TPDS value chain segments, all the technology options identified during the benchmarking exercise were evaluated against specific success metrics for the process. The most suitable solution option (i.e. the one that best achieved the success metrics for the process) was selected as the best practice option

for the process. The best practice options for each process in the TPDS value chain were combined (accounting for dependencies across processes and value chain segments) to create the TPDS Best Practice Solution. In evaluating the different solution options, the new opportunities presented by a number of recent enabling trends were kept in mind. The fast advancing coverage of the country's population by Aadhaar and the availability of electricity and mobile coverage in more than 90% of the country's villages have opened up the potential for FPS automation and for robust beneficiary authentication at the time of transaction – something that had not previously been feasible.

## 2.5 EARLY AND FREQUENT ENGAGEMENT OF TPDS STAKEHOLDERS, EXPERTS AND VENDORS

To ensure that the Best Practice Solution was practical and implementable, perspectives were

continuously taken from a variety of TPDS stakeholders including the Department of Food and Public Distribution at central level, state Food Departments with experience in TPDS pilot implementation, FPS owners and beneficiaries. Additionally, topic experts were also consulted from a broad range of backgrounds including the Central Vigilance Committee chaired by Justice Wadhwa, the National Informatics Centre (NIC), UIDAI, National Population Register (NPR), the Food and Agriculture Organisation and many experts from civil society and academic institutions. Lastly, TPDS solution providers were also consulted to understand challenges faced in prior implementations and for costing estimates for different solution components.

## 2.6 ANALYSIS OF POTENTIAL FUTURE CHANGES IN THE TPDS OPERATING ENVIRONMENT

The operating environment of the TPDS is constantly evolving. To ensure that the solution is



flexible and remains a viable alternative for the foreseeable future, potential policy changes and government studies that could have a significant impact on TPDS were studied and the solution was evaluated for its flexibility to these changes.

The solution is compatible with the NFSA (2013); its provisions need some adjustments in the processes defined for beneficiary identification and its categorisation into priority and general groups.

The ongoing debate on use of Direct Benefit Transfer (DBT) in TPDS has immense potential. The proposed solution is easily adaptable and changes can be incorporated to pilot various DBT options.

## 2.7 NATIONAL LEVEL 'SOLUTIONS WORKSHOP' TO SOLICIT FEEDBACK FROM KEY TPDS STAKEHOLDERS

The Department of Food and Public Distribution and WFP co-organised a TPDS solutions

workshop on 6 February, 2013 to get feedback from key TPDS stakeholders. The workshop was attended by representatives of a number of state governments as well as those from NPR, UIDAI, NIC, academia and the non-profit sector. Participants discussed key learnings from the state TPDS pilot benchmarking effort and brainstormed upon a number of key TPDS issues. Feedback from the Solutions Workshop was incorporated into the TPDS Best Practice Solution described in this document.

### 3. Recommended Best Practice Solution

The TPDS Best Practice Solution was designed to achieve the three main objectives previously laid out for the TPDS:

- Proper targeting of subsidy
- Leakage reduction
- Improved stakeholder convenience

As shown in Figure 1, the recommended TPDS Best Practice Solution has nine key features:

- De-duplicated beneficiary list created by leveraging uniqueness of beneficiary Aadhaar numbers
- Provisions to keep ration card database updated and accurate
- Automated allocation of food grains based on previous off-take by tracking food grains stock levels
- Doorstep delivery of food grains to FPS with automated SMS notifications at dispatch
- PoS enabled online transaction at FPS after biometric authentication of beneficiary using Aadhaar
- Ability for beneficiary to purchase ration from any FPS (portability)
- Improved FPS viability to incentivize better FPS performance
- Easily accessible and effective grievance redressal
- MIS for operations management, system implementation and transparency. The solution

is designed to be as flexible as possible to adjust to specific state requirements and conditions prevailing in different states. We recommend.

Figure 1: Overview Of Features In Recommended TPDS Best Practice Solution

Recommended TPDS solution has nine key features

Beneficiary identification and Enrolment	Supply chain operations	FPS transactions	Grievance redressal
1. De-duplicated beneficiary list created by leveraging uniqueness of beneficiary	3. Automated allocation of foodgrain based on previous off take by tracking	5. PoS enabled online transaction at FPS after biometric authentication of beneficiary	8. Easily accessible & effective grievance redressal

Aadhaar numbers	foodgrain stock levels	using Aadhaar	
2. Provisions to keep ration card database updated and accurate	4. Doorstep delivery of food grains to FPS with automated SMS notification s at dispatch	6. Ability for beneficiary to purchase ration from any FPS (Portability) 7. Improved FPS viability to incentivise better FPS performance	

9. MIS for operations management, system implementation & transparency implementing all the above mentioned features to ensure a holistic approach to strengthen all aspects of the TPDS. However, the solution is designed to be as modular

as possible in order to allow for implementation in a phased manner if operating constraints so require.

### 3.1 DE-DUPLICATED BENEFICIARY LIST CREATED BY LEVERAGING UNIQUENESS OF BENEFICIARY AADHAAR NUMBERS

An accurate beneficiary list populated only by unique, real and correctly classified beneficiaries is the foundation of a well functioning TPDS. The NFSA (2013) necessitates creating an updated digitized beneficiary list, finalised using an objective criteria and leveraging the Aadhaar platform for better targeting. A state can choose to address this issue depending on its appetite for complexity and the given timeline keeping in mind the window of 365 days provided by the Act. The different options for states are:

- Option A: Replace existing ration cards and allow left out beneficiaries to apply for new cards if they are on the beneficiary list (but did not have a ration card)

In July 2013, the Government of India issued guidelines on the population in each state to be covered under TPDS as per NFSA (2013). This provides state governments an opportunity to reduce bogus (duplicate and fake) ration cards as well as shadow ownership. This can be achieved by giving new cards after de-duplication and authentication to beneficiaries who previously held ration cards. States can reduce exclusion errors by allowing eligible beneficiaries who previously did not have cards to apply. Further, inclusion errors can be minimized by cancelling the cards of ineligible beneficiaries so that the resultant final beneficiary list is within the coverage mentioned for that particular state as per NFSA (2013). This might not be the best way but offers an advantage of speedier implementation of the Act.

- Option B: Completely overhaul the system by using a new survey as the basis of beneficiary classification Reduce bogus (duplicate and fake)

ration cards, shadow ownership, inclusion and exclusion errors by using a comprehensive, updated survey with revised classifications as the basis of issuing new ration cards after de-duplication and beneficiary authentication. The states can either use the Socio-Economic Caste Census data or define a set of inclusion and exclusion criteria.

The first step for either of these options is the digitisation of beneficiary lists to put beneficiary data in a standardized searchable database format along the lines of suggestions made by NIC. The source data for the digitised beneficiary list will depend on which one of the above mentioned options is chosen by the state.

The next step is to remove duplicate and fake cards from the list. For this purpose, biometric de-duplication provides the best results in terms of accuracy and reliability. Biometric based de-duplication is superior to a number of other methods such as de-duplication based on text (e.g.



father's name, address etc.), Elector Photo Identity Card (EPIC), electricity connection numbers and property ownership records that have been tried out by states with varying degrees of success. The reliability of these other methods is highly dependent on data quality which is sometimes poor and their applicability is often limited by the fact that they do not cover the entire target population in many areas e.g. EPIC numbers only cover the adult population of the area that is eligible to vote. On the other hand, biometric based de-duplication relies on biometrics which are available with nearly all beneficiaries (rare cases may not have fingerprints, which may be covered through exceptions), leverage the inherent uniqueness of fingerprints (10 fingerprints create a nearly unique combination) and are difficult to manipulate or falsify in comparison with other ID sources as there is no manual input. It is therefore recommended that fingerprint based biometrics be used for de-duplication. Other methods may be used as an

initial screen if desired as a temporary measure in areas where biometric enrolment is currently low, but de-duplication using biometrics should then be done as soon as higher biometric enrolment rates are achieved. Biometric based de-duplication however, necessitates the need for biometric records of all beneficiaries to be available – something that UIDAI and NPR are currently in the process of undertaking across the nation. Some pilot projects have undertaken biometric enrolment independently (Rayagada in Odisha and in Chandigarh) in a pre-Aadhaar world, but in light of the increasing coverage of Aadhaar (56 crore/560 million people have already been registered); it is recommended that states leverage this existing platform. The benefits of using the Aadhaar platform for biometrics include not only standardised, high quality data and the fact that deduplication is carried out all across the nation, but also the significant saving of cost for states as Aadhaar is funded by the Government of India. The

fact that states do not have to enrol biometrics separately and do de-duplication on their own also saves a significant amount of time and reduces the complexity for the state implementation significantly. Another benefit of using Aadhaar over other proprietary biometric enrolments is that the Aadhaar platform provides the possibility to do quick online, real-time authentication that can be very useful for enabling beneficiary authentication at the FPS. To facilitate the use of Aadhaar for duplication, the unique ID (Aadhaar) number issued for each beneficiary has to be mapped onto the digitised ration card database. This process is called 'seeding'. 'Seeding' of digitised TPDS beneficiary lists with the Aadhaar numbers removes duplicate entries as one individual can only have one Aadhaar number. After Aadhaar enrolment and seeding is completed in an area (this will be a phased process to give beneficiaries enough time to enroll themselves in Aadhaar and for seeding to take place), any entries in the beneficiary list that

remain unseeded can be safely assumed to be either duplicate entries or fake and ghost entries. This process has yielded significant savings in the Aadhaar based TPDS pilot in East Godavari district through a significant reduction in the number of ration cards after seeding. Based on experience with biometric enrolment in Rayagada, Odisha and the Aadhaar based pilot in East Godavari, the best way to achieve FPS automation is to switch to the new system once biometric enrolment has crossed 80% of the beneficiary population in a state or union territory. A grace period of three to four months should be provided for the remaining beneficiaries to get biometrically enrolled and seeded, after which their manual entitlements should be stopped.

Doing so provides an incentive for people to get enrolled. Without this, enrolment may not reach 100% completion within a reasonable timeframe. Adequate exception management measures should be in place to ensure that no rightful beneficiary is

deprived of their allotment but a limited grace period is essential for the transition to the new system.

Once duplicates, fakes, ghosts and bogus cards have been identified and removed from the beneficiary database, it is recommended that the state governments distribute new ration cards to beneficiaries to replace old ration cards. To reduce shadow ownership of cards, it is advisable to distribute ration cards only after biometric authentication of the beneficiary at the point of disbursement. The Aadhaar platform provides the ability to do biometric authentications in real time against data that resides on the UIDAI servers. Additionally, the old ration cards should be collected during distribution of new ration cards and transactions should be discontinued on old ration cards after a sufficient grace period to ensure that rightful beneficiaries are not deprived of their rights.

Significant success has been demonstrated in removal of bogus cards by biometric deduplication in the East Godavari (Andhra Pradesh) and Rayagada (Odisha) pilots. East Godavari carried out an Aadhaar based biometric de-duplication of the digitized ration card list and was able to eliminate 7.4% of the ration cards which were bogus. This has resulted in savings of around Rs.45,000 (USD 750) per FPS10 (more details are provided in Section 5 on Financial Feasibility). In the Rayagada pilot, 10.9% of total ration cards which were bogus have been eliminated based on a biometric deduplication carried out across the district.

### 3.2 PROVISIONS TO KEEP RATION CARD DATABASE ACCURATE AND UPDATED

In order to ensure that the ration card database remains accurate and updated with the latest details, it is recommended that easily accessible facilities be provided to beneficiaries to allow for modifications to ration cards that are

automatically reflected in the ration card database.

The range of modifications allowed can vary according to the state's requirements. Some potential changes include:

- Allowing previously left out beneficiaries to request ration cards
- Update of ration cards to account for births, deaths, marriages etc.
- Allowing for migrants to request new ration cards
- Change of address etc.

The benefits of having an established facility to continuously update ration card databases are manifold. Doing so, allows regular updates to ration card details, while providing significant convenience to beneficiaries. It also provides an avenue

Figure 2: Schematic of Recommended Solution –  
De-duplicated Beneficiary List Created by  
Leveraging Uniqueness of Beneficiary Aadhaar

## Numbers with Provision to Update Ration Card Database

1. create base list of all targeted beneficiaries with their classification		2.Aadhaar enrolment of beneficiaries		3. Removal of duplicate & bogus cards	
Option A: Replace cards + new beneficiaries		Option B: overhaul system		All beneficiaries	
Food dept seeds UID/EID database on base list of targeted beneficiaries (during or post aadhaar enrolment)					
Existing ration card holders	New applicants	New household survey conducted including all beneficiaries with correct classification	Beneficiary submits ID proof address proof and KYR + form		Food dept seeds UID/EID database on base list of targeted beneficiaries (during or post Aadhaar enrolment)
Data entry person digitized existing ration cards	Beneficiary submits new form with relevant documents		India/NPR operator captures beneficiary biometric (10 fingerprints Iris and phot ) or use the SECC info for categorization		Multiple enrolment
					Duplicate cards removed
	Food official records data after taxtual de dupe and notes classific	Household survey digitized	Aadhaar operator enters details and generates EID	NPR provides biometrics to UIDAI	Single enrolment
					Valid seeded cards



	ation from existing BPL List					
	All new records collated centrally		UIDAI generates UID after biometric de- duplication		No enrolment	Bogus cards remo ved
	Base list of all targeted benefici aries and their classific ation	Base list of all targeted benefici aries & their classific ation		Databas e of UID of benefici aries	Printing distribution & of valid ration cards	
					Valid benefici aries	Aadhaa r verificat ion
					Beneficiary collects printed ration card	

5. Manage RC4 database to reflect changes of beneficiary status ( birth/death/ marriage/migration) and their classification

1. Know Your Resident
2. Enrolment ID
3. Unique ID
4. Ration card

Source: WFP/BCG Analysis

to ensure that the beneficiary lists remain up-to-date, especially in locations where the previous BPL

surveys were carried out more than a decade ago and have remained the same ever since.

As is already the case in a number of states, a block level office which manages update of ration cards and beneficiary lists is recommended. This office can also be used for other management tasks for the TPDS in the block, potentially doubling up as a walking grievance redressal centre as well. Other options to consider are using Panchayat (local government) offices or Common Service Centres for this purpose. The suitability of a particular option for this will depend on the specific situation in the state. Figure 2 provides a schematic overview of best practice solution recommendations covered under sections 3.1 and 3.2.

### 3.3 AUTOMATED ALLOCATION OF FOOD GRAIN BASED ON PREVIOUS OFF-TAKE BY TRACKING FOOD GRAIN STOCK LEVELS

Field visits, interviews with TPDS stakeholders and analysis of records shows that the actual off-take of food grains from FPS is significantly lower than the standard allocation to the FPS, i.e. all beneficiaries do not purchase their share of ration each month, especially in the APL category. This is apparent from the fact that a few states have been able to significantly reduce their APL allotments without apparent inconvenience to beneficiaries. Current manual and paper based procedures for food grain allocation and reconciliation of sales reports leave significant scope for manipulation and misreporting of transactions at FPS as well as closing balance stocks at the end of the month. This results in zero closing balances in a large number of shops and close to the full allocation being sent to the FPS each month. The additional grain (over and above the actual off-take) is available for diversion at a significant profit.

To tackle this issue, it is recommended the Food Department ensures that allotment to each FPS is made automatically on the basis of verifiable transactions at the FPS that result in accurate food grain stock status reports that are available centrally (this is done through the use of PoS devices at FPS which operate in online mode and update each transaction on the Food Department servers. More details are provided under point 3.5 of this section). The benefits of doing this are substantial, which has been demonstrated in pilot projects such as the Chhattisgarh Centralised Online Real-Time Electronic Public Distribution System (COREPDS) pilot<sup>11</sup>. Allocation based on off-take, have resulted in significant operational improvements due to automation and central management of the supply chain.

Under the traditional system, allotments are done on a monthly basis based on the previous month's off-take. However, under the portability

paradigm proposed as part of the best practice solution (more details provided under section 3.6), allotment will no longer necessarily be on a monthly basis. As beneficiaries can choose which FPS they want to buy their rations from, allotment will now need to be done on a dynamic basis. Every time the stock levels in an FPS fall below a pre-defined threshold value, it will automatically trigger an allotment based on the previous off-take and a message will be sent to the FPS owner to submit payment for the allotted food grain amount. Once payment is made, the food grain can be dispatched to the FPS.

To simplify the payment procedure for the FPS owner, it is advised that the state government establish tie-ups with local banks. The bank should be linked to the Food Department's account at the back end, allowing the FPS owner to directly submit the requisite payment without having to travel to the central Food Department offices. This would save the FPS owners a significant amount of time

and effort and would accelerate the process of payment while allowing for easier tracking of payment status than the current manual paper based methods.

### 3.4 DOORSTEP DELIVERY OF FOOD GRAINS TO FPS WITH AUTOMATED SMS NOTIFICATIONS AT DISPATCH

Effective monitoring and control over the vast TPDS supply chain is a tough task to carry out manually. This leads to opportunities for pilferage, late delivery of food grains to FPS which causes inconvenience to consumers and an overall lack of transparency in the system's operations for all stakeholders including food officials. To address these issues in the TPDS supply chain, it is recommended to have end-to-end computerisation which allows for real-time stock tracking of food grain at all points, thus checking leakage, aiding in better control over operations while providing information to the relevant stakeholders about status of grain delivery.

For reducing leakage during the delivery, it is recommended to install electronic weighbridges linked to computers at the state warehouses. This allows for accurate weighing of food grains for delivery, with the attached computer ensuring all information gets logged onto the system without human intervention. However, it is advisable to keep the inbound weighing at FPS optional, with the FPS owner taking full responsibility for any future mismatch once he or she accepts the delivery. The rationale for this is that the process of weighing can be cumbersome and tough to manage with a small weighing machine at the FPS, thus the FPS owner should have freedom to accept the delivery if he/she has confidence that the quantity delivered is as stated. Additionally, it is recommended that vigilance committees be involved in the verification of grain delivery to FPS to ensure checks. Any mismatch in grain quantity dispatched from warehouse and final sales would automatically reflect in the sales report. A PoS

device at the FPS will allow tracking of sales at the FPS (more details are provided under point 3.5 of this section), while also allowing for the biometric based verification of grain delivery by the state government authorities, FPS owner, Panchayati Raj Institutions, vigilance committees etc.

For ensuring better control over delivery schedules of grains and to provide significant time and cost saving to FPS owners, it is recommended that the state do doorstep delivery of food grains to the FPS, i.e. managing all grain transportation operations internally via the Food Department or Civil Supplies Corporation. The problems of erratic delivery scheduling - currently faced when transportation from state warehouses to FPS is under the control of FPS owner - will be addressed. This will give the government more control over when food grains are transported to the FPS, thereby ensuring grain availability at the FPS at all times. Additionally, doorstep delivery also gives the FPS owner a financial incentive in terms of cost



saved for not having to arrange transportation. The state government should ensure that proper contracts are negotiated and that the transporters are operating properly.

For ensuring proper operations on the part of the FPS owner and transporter, it is recommended that SMS notifications be automatically issued and communicated to all beneficiaries and vigilance committee members at the point of truck dispatch from warehouse with details of grain quantities, departure date and time as well as vehicle numbers. Beneficiaries should be able to opt in for notifications, thus being able to not only check grain delivery, but also to have better visibility of stock availability at the FPS. For improving convenience of the FPS owner, it is recommended that automatic SMS notifications be issued to them when stock levels reach re-order point, which is automatically tracked via the PoS device based on transaction data. The SMS should contain information on the amount of money to be

deposited to dispatch subsequent delivery from the warehouse. After FPS owner deposits money to the bank, an automatic trigger goes to the warehouse to dispatch the requisite quantity of grain to the FPS.

Global Positioning System (GPS) tracking of food trucks is often proposed as a means of strengthening supply chain operations by preventing diversion of vehicles during grain deliveries to the FPS. This involves installation of a dedicated GPS device on the transportation vehicle which provides real-time information on the location of the truck, which can be tracked from a central location. To automate the tracking process, dedicated routes can be defined for the truck and the GPS tracker issues a notification if there is any deviation from the defined route.

However, there are significant issues with GPS tracking as it is prone to manipulation without providing an effective check on pilferage:

- GPS tracking devices can be easily removed from trucks owing to external installation. To manipulate the system, the removed device can be attached onto a proxy vehicle to mirror the truck route.
- Pilferage can occur from trucks which are standstill en route to the FPS – tracking via GPS is not effective here as the location and route will be shown to be correct.
- If there is mismatch in delivered quantity at the FPS (assuming that the correct route is followed according to GPS data) resolution of the issue still requires manual intervention by officials. Thus, value added by GPS tracking is minimised.

Additionally, there is significant increase in operational complexity if GPS tracking has to be implemented and managed:

- Installation of devices is expensive as each vehicle needs a dedicated device. Additionally, the fleet of trucks changes frequently due to new contracts, availability of vehicles, breakdowns etc. which significantly increases cost of device installation.
- Central tracking facility and IT systems need to be developed, tested and maintained which adds operational complexity.

For the reasons mentioned above, the recommended TPDS Best Practice Solution does not include GPS tracking as a solution option. Figure 3 provides a schematic overview of the recommendations covered under sections 3.3 and 3.4.

Figure 3: Schematic Of Recommended Solution – Automated Allocation Of Food Grain Based On Previous Off-Take By Tracking Food Grain Stock Levels, Doorstep Delivery Of Food Grains To FPS With Automated SMS Notifications At Dispatch

Automate allocation based on previous off-take and maintain electronic records of grain stock throughout supply chain

Before grain dispatch from warehouse	Grain dispatch & delivery	Grain receipt at FPS
Automatic trigger when stock levels reach pre-defined re-order point at FPS		SMS notification of dispatch to vigilance committees, beneficiaries & FPS

Automated calculation of allocation quantity

Automatic trigger when stock levels reach pre-defined re-order point at FPS	Food Department Automated calculation of allocation quantity	Dispatch approval after payment is received	Warehouse Electronic weighing and recording of outbound grains	Doorstep delivery	Counting of bags (with optional weighing)
---	--	---	--	-------------------	---

Electronic verification of delivery on PoS by FPS owner and vigilance committee members

Ready for FPS transaction

Information flow grain flow

Automated trigger for dispatch after payment by FPS owner at bank

1. Information on truck dispatch time, truck details & grain quantities
2. Choice left to FPS owner who must take responsibility for amount of foodgrains after signing electronic verification of delivery

Source:

Real-time, online end-to-end computerisation of the supply chain has been demonstrated successfully in the Chhattisgarh COREPDS pilot<sup>12</sup> where allocation for the subsequent month is done online automatically once the stock at the FPS reaches below a pre-defined level. The transactions are recorded via the PoS device at the FPS. After the online trigger reaches the warehouse, the warehouse official issues a payment 'challan'<sup>13</sup> which the FPS owner can conveniently pay at the nearest bank. Following online payment, doorstep delivery is triggered to the FPS along with SMS notifications to the registered beneficiaries. The online and dynamic nature of supply chain allows

COREPDS to successfully facilitate on-demand, reliable and timely delivery of food grains to the FPS facilitating portability.

### 3.5 POS ENABLED ONLINE TRANSACTION AT FPS AFTER BIOMETRIC AUTHENTICATION OF BENEFICIARY USING AADHAAR

The primary challenge faced by the TPDS in operations at the FPS is the significant potential for misreporting of sales. Under the current paper based system, it is possible to report sale of higher quantity than actually sold as well as to report sales that did not even occur. To make operations at the FPS more transparent and more difficult to misreport, it is recommended that a PoS device be utilised for FPS transactions with internet enabled biometric authentication (Aadhaar based). The PoS device should be connected to an electronic weighing machine. It is advised that as an additional feature, the PoS be voice enabled in the

local language to improve convenience of beneficiaries with poor literacy levels.

A PoS device connected to the weighing machine addresses both the issues, ensuring transaction logging while verifying correct weight of sale to beneficiaries. Online biometric authentication allows for authentication of the beneficiary, thereby reducing the scope for the FPS owner to manipulate sales records. Over 90% of India's villages now have data connectivity (largely through mobile connectivity) and other mechanisms such as landlines, Very Small Aperture Terminal (VSAT), Worldwide Interoperability for Microwave Access (WiMAX) etc. can be used to supplement connectivity in the remaining areas. Aadhaar enabled pilots in tribal areas in East Godavari district and in mountainous regions of Tripura have demonstrated that online Aadhaar authentication is possible even in remote areas in less than one minute in most cases. A robust contingency plan



with comprehensive exception management is recommended to ensure that issues with connectivity or authentication (e.g. manual labourers sometimes face issues due to the impact of their work on their fingerprints) do not deprive rightful beneficiaries of their food grains.

An online based transaction system also allows for flexibility in changing entitlement quantities and commodities (e.g. if the food basket is expanded to provide better nutrition) and only requires updates to be done to the central system. Additionally, if allocation to different ration card classifications changes in the future, ration cards will not have to be reprinted and instead changes can be made to the central system itself. Aadhaar based authentication allows for portability for migrant population without additional setup, as biometric data is stored centrally.

The online PoS device facilitates easy tracking of stock levels at the FPS, which can be leveraged

to improve supply chain operations by closing the information loop that feeds the allotment triggering mechanism, as detailed in section 3.3.

A variety of solutions have been piloted for strengthening FPS transactions across different states, including barcoded coupons and smart cards. These solutions have certain merits, but an online Aadhaar based biometric solution using a PoS device was found to be the most suitable option across a broad range of criteria.

Figure 4 provides a schematic of the recommended TPDS Best Practice Solution for transactions at the FPS.

Other solution options that were analysed for FPS transactions include barcoded coupon and smart card based options. There are two potential variants of the barcoded coupon based system:

- Coupons that are issued to the beneficiary in one block that last 12-24 months (this option was tested out in rural FPS at Rayagada, Odisha).
- Coupons that are issued on a monthly basis (like the system currently being rolled out in Gujarat which uses computer and internet enabled village centres to issue coupons after biometric authentication of the beneficiary).

Under both these solution options, beneficiaries collect unique barcoded coupons, which are then used for transactions at the FPS.

These coupons then need to be scanned in order for the actual off-take to be tracked in the system.

Coupon based systems face a number of issues:

- Coupons can get lost, stolen or mutilated. Since scanning the coupon is the only way in which the transaction can be verified, the loss or destruction of the coupon prevents the information loop from being completed. This is a significant drawback for coupons that are issued in bulk for extended periods of time.
- Coupon printing is a significant recurring expense. This expense is even larger in case of coupons that are designed to be non-replicable.
- The cost and complexity of distributing coupons on a monthly basis can be prohibitive, especially in areas which do not have the village level infrastructure to distribute coupons.

Figure 4: Schematic Of Recommended Solution –  
PoS Enabled Online Transaction At FPS After  
Biometric Authentication Of Beneficiary Using  
Aadhaar

Conduct online transactions via POS with real-time  
AADHAAR based biometric authentication of  
beneficiary at FPS

- The cost and complexity of collecting and scanning coupons quickly enough to enable the next month's allotment to be done on the basis of the previous month's off-take is significant. Trying to run a system that allows portability (more details are provided under point 3.6 of this section) based on barcoded coupons would be very challenging.
- Finally, once coupons are issued, changes in entitlements cannot be made as the coupon cannot be modified after printing. This is particularly an issue in the case of coupons that are issued in bulk.

Figure 5 provides a summary of the comparison between the two barcoded coupon options and the recommended TPDS Best Practice Solution.

Smart card based solutions are the other option that is often proposed for FPS transactions. All beneficiaries are provided with a smart card with a memory chip that can be used to store beneficiary details, transaction data as well as (in some cases) biometric information. Smart cards require PoS devices at the FPS in the same way as the recommended best practice solution.

One of the main benefits of smart cards is their ability to store multiple types of data. This makes the smart card highly suitable for offline transactions. Even limited FPS portability can be enabled in offline mode using smart cards. This is not possible under the recommended TPDS Best Practice Solution. However, as previously stated connectivity is increasingly available even in the remotest villages (more than 90% of India's

villages have mobile connectivity and for the remaining a combination of landline, VSAT and WiMAX can be used). Using a redundancy based approach in which each FPS has at least two possible connectivity mechanisms can ensure minimal downtime. Moreover, the recommended solution incorporates a robust contingency plan to allow for transactions to continue even if connectivity were to fail. This ensures no denial of service to rightful beneficiaries under any condition.

While smart cards do have their merits, in a comparative analysis against smart card based solutions the recommended online Aadhaar enabled PoS based solution proved to be more suitable. In locations in which connectivity is available, smart cards offer no clear additional benefit in comparison with the recommended TPDS Best Practice Solution but do have a number of specific issues. Some of the issues that have been observed with smart card based solutions (in Rayagada, Odisha) include:

- Smart cards cost Rs. 50 - 100 (USD 0.83 - 1.66) (cost of physical card and cost of personalisation) and have a limited life (two to five years depending on usage). This has significant upfront and recurring cost implications for the system.
- The pace of rollout of the system is dependent on how fast smart cards can be personalised and distributed. This can slow down implementation of the FPS transaction system compared with an Aadhaar based system in which the rate determining step is the seeding of the beneficiary database but there is no physical token required to be handed over to the beneficiary.
- Like all other physical tokens, smart cards can get lost, stolen or damaged. Experience from Rayagada, Odisha shows that card damage and loss can be a significant issue from an operational, cost and consumer convenience standpoint. Additionally, if connectivity to



support online application is good, the use of smart card is redundant.

### 3.6 ABILITY FOR BENEFICIARY TO PURCHASE RATION FROM ANY FPS (PORTABILITY)

A number of problems in the TPDS stem from the significant power imbalance between the FPS owner and the beneficiary. Under the current system, the beneficiary is attached to a single FPS regardless of its performance or service quality. FPS owners often use this lack of freedom of beneficiaries to their advantage resulting in a host of issues including poor quality of service, under weighing of grains, misbehaviour and poor treatment of beneficiaries, claims of no stock availability and the FPS being open for only a few days in the month. There are no disincentives in place for these issues that FPS owners need to think about. Additionally, FPS owners are not financially incentivised for good performance, as their profit is limited by the number of ration cards attached to the FPS

regardless of how well they manage their operations.

To counter this issue, statewide FPS portability is recommended, under which beneficiaries can purchase food grains from any FPS of their choice. The benefits of portability are significant. The power balance shifts towards the beneficiaries through free-market dynamics enabled by the provision of choice. Beneficiaries can take their business to an FPS that ensures proper service quality, thereby weeding out poorly performing FPS over time. Also, beneficiary convenience is increased as they can now easily purchase ration at desired locations, which can sometimes be an issue because of address changes and relocations.

In the long term, portability could be made available at a pan-India level leveraging the Aadhaar platform which stores data centrally. This would help serve the needs of the migrant

workforce who presently have no means of getting ration if they relocate temporarily. States and union territories should pursue portability depending on the maturity of their IT systems and capability to ensure dynamic availability of food grains across the target locations.

Creating competition among FPS owners has been demonstrated to yield significant improvements in the TPDS, as is evidenced by the COREPDS pilot in Raipur, Chhattisgarh. Facilitating portability places a number of demands on the TPDS. A system that enables portability needs to be able to:

- Uniquely identify and authenticate beneficiaries at any FPS
- Determine beneficiary's entitlement and family details at any FPS
- Track beneficiary's previous purchase history in real time
- Replenish food grain at the FPS

dynamically based on stock levels

The recommended Best Practice Solution addresses all these requirements by having an online biometric based system for identification (Aadhaar), online storage and retrieval of beneficiary details and transaction history. It is also enabled through an end-to-end computerized supply chain with real time tracking of grains and doorstep delivery.

Portability is recommended in both urban and rural settings. There are a few constraints for portability in rural settings due to FPS which are spread across a larger area (as compared to urban settings which have a large number of FPS in a small area), but the benefits in terms of consumer choice and the incentive and disincentives for FPS performance due to competition are still significant. In rural areas, given the longer distance over which food grains need to be transported, longer lead times may need to be built into the supply chain by triggering replenishment at FPS at higher stock levels than in urban areas where replenishment can

occur at much shorter notice. To ensure that the option for FPS portability remains viable and practical in rural settings where distances between shops are usually larger, a mobile FPS can be operated to supplement existing FPS. This would be in the form of a state run truck selling TPDS commodities that visits villages on a weekly basis.

Significant success around portability has been seen in the COREPDS pilot at Chhattisgarh<sup>14</sup>; implemented in around 170 FPS in Raipur city. A large number of beneficiaries purchase food grains from FPS other than the one which they are assigned to - a phenomenon which is widespread in the urban FPS clusters but also seen in rural FPS. FPS with good performance and service have seen the number of ration cards purchasing from them increase substantially, even up to four times the number of cards originally assigned to the FPS. Additionally, poorly performing FPS have been weeded out of the system; about 20 FPS have

cancelled their licenses due to very low sales, attributed to poor service quality at the FPS.

### 3.7 IMPROVED FPS VIABILITY TO INCENTIVISE BETTER FPS PERFORMANCE

The TPDS has seen significant changes over the past decade. However, the commission structure for FPS in many states has remained the same for a number of years. This is a major cause for concern for the implementation of any measures to strengthen the TPDS. Any TPDS solution will need the support and collaboration of FPS owners in order to be successful, especially solutions that will close loopholes that can currently be exploited to divert food grains. Implementing a TPDS solution will require learning (through training) on part of the FPS owner to operate a new system. Also the responsibility for maintenance of any PoS devices and for ensuring proper transaction logging rests with the FPS owner. Given that the FPS owner

serves as a focal point in the value chain, it is important to address the issue of FPS viability.

Analysis reveals poor financial conditions of FPS operations throughout large parts of the country<sup>15</sup>:

- Rs. 1.5 lakh (USD2,500)<sup>16</sup> subsidy<sup>17</sup> flows through a typical FPS from which the commission for the FPS owner is Rs.3,200 (USD 53)<sup>18</sup> – merely around 2% of the subsidy amount
- Only 40% of FPS can earn revenue more than costs<sup>19</sup>
- Only 23% of FPS are able to generate more revenue than investments<sup>20</sup>
- Even if costs of transport, labour and rent for the FPS were fully subsidised, it would still not result in more than 70% of FPS being profitable.

Given these facts, it should be no surprise that many FPS owners indulge in pilferage to ensure that their efforts give returns.

It is recommended that viability be improved to incentivise FPS to perform honestly and with better service quality. Thus, FPS owners should be provided with incentives to improve the viability of their operations. In addition to higher commissions (something that has been tried out in states like Chhattisgarh and Gujarat), measures like subsidisation of FPS rent and doorstep delivery have also been tried. In addition to financial incentives, measures to streamline processes to save time and paperwork for FPS owners should also be considered in consultation with FPS owners.

Improvements in FPS viability are essential to get support for reforms from one of the key stakeholders in TPDS (the FPS owner) and attempts to bring FPS owners into the fold by providing them with an attractive return for good service and performance is imperative.



### 3.8 EASILY ACCESSIBLE AND EFFECTIVE GRIEVANCE REDRESSAL

The recommended TPDS Best Practice Solution provides for a strong grievance redressal mechanism. This is in line with the National Food Security Act which requires a grievance redressal mechanism as integral part of TPDS operations. The Act provides for a two tier grievance redressal mechanism comprising of District Grievance Redressal Officers and State Food Commissions.

An effective grievance redressal system has two main components:

- Logging and tracking of complaints with proper details
- Proper and timely resolution of the complaint

It is recommended that multiple channels be made available for logging and tracking of complaints for the convenience of stakeholders:

- Physical letters

- Website
- Toll-free helpline
- Public meetings

The system should give each complainant a unique identification number that is communicated to the stakeholder (via SMS, e-mail or toll-free helpline). While logging the complaint, all necessary details should be captured. Confidentiality and anonymity of the complainant should be ensured wherever appropriate and possible.

An important responsibility rests on an assigned grievance redressal manager, who acts as facilitator for forwarding valid complaints to the relevant authorities and ensures that action is taken if the authority does not respond adequately within the stipulated time for resolution. The grievance redressal manager should be senior enough to be able to execute his or her duties without pressure from government officials.

A senior retired government employee with a support staff would be an ideal candidate. Follow up

and resolution of complaints should be tracked through the MIS. To ensure that the system runs smoothly, participation of vigilance committees is recommended. These should be formed at all levels (state, district, block and FPS) and should regularly review the functioning of the TPDS. Social audits should also be carried out periodically to have institutional checks on system operations, as well as to sensitise and mobilise beneficiaries.

### 3.9 MIS FOR OPERATIONS MANAGEMENT, SYSTEM IMPLEMENTATION AND TRANSPARENCY

An effective MIS fulfils three major criteria:

- Capture all appropriate data in an accurate and timely manner
- Convert the captured data into analysis and present usable reports to the relevant stakeholders as well as determine trends in data over time to present analysis for long-term improvement of TPDS
- Ensure that the relevant authorities follow up with the required action, which can be

facilitated by providing incentives and disincentives to stakeholders.

The main feature of such an MIS is that relevant reports should be accessible to all stakeholders – food officials, TPDS agencies, FPS owners and even beneficiaries. Access to information should be based on what information is relevant for which stakeholder.

The MIS should be used to enable and monitor inspections by providing officials with the reports that they need for physical verification and also by tracking the completion and results of different inspections as per defined protocols.

Figure 7: Schematic Of Recommended Solution – Easily Accessible And Effective Grievance Redressal

Figure 8: Schematic Of Recommended Solution – Structure And Salient Features Of The MIS

Use real-time MIS reports for decision making and transparency Relevant reports should be accessible to stakeholders - Food officials, operators, FPS, beneficiaries.

Use MIS to enable and monitor inspections by providing reports for physical verification and by tracking completion as per defined protocols

As shown in Figures 8 and 9, the design of the MIS should include the following categories of reports/analysis:

- Reports for operations management (to ensure smooth day to day functioning of operations)
- Analytics for system improvement (to improve system over time) These categories should each have two types of reports:
  - Routine monitoring reports (pushed to the relevant authority with all necessary information to ensure action)

- Ad hoc reports (reports that can be generated by the authorities if required to get additional background information).

The MIS should also track the actions taken by the authorities based on the data and reports.

It is recommended that stakeholders who actively participate in the process to bring about system improvement be provided incentives to recognise their efforts and reward good performance. Similarly, poorly performing stakeholders should be brought to attention and corrective actions should be taken in a transparent and fair manner. Lastly, relevant information and reports should be made available to the beneficiaries and vigilance committees via a public transparency portal.

### 3.10 SUMMARY OF THE RECOMMENDED TPDS BEST PRACTICE SOLUTION

The recommended Solution combines the most suitable options for every process in each of the four TPDS value chain segments. Figure 10

provides a high level summary of the TPDS Best Practice Solution that combines the nine features described in sections 3.1 to 3.9.

As illustrated in Figure 11, the recommended TPDS Best Practice Solution targets all the key success factors identified for a successful TPDS system.

Figure 9: Recommended MIS Design And Flexibility Of Access

MIS provides flexibility for stakeholders to get a variety of reports at chosen level of granularity

Ultimate aim of MIS is to improve TPDS performance over time by facilitating data-driven decisions

### 3.11 ROBUST CONTINGENCY PLAN

Given the significant diversity in operating conditions for TPDS while also realizing that all situations cannot be predicted in advance, it is recommended that a detailed contingency plan be prepared for ensuring the continuous smooth

operation of the system. The guiding principle should be that genuine beneficiaries should not be denied service and that technology should be implemented to simplify processes rather than serve as a hindrance to the provision of service to beneficiaries.

Considering the technological nature of the TPDS Best Practice Solution, it is inevitable that issues may arise around machine operations, breakdowns and technical glitches. It is essential to have a list of solutions for all major contingencies, with a default base case for all remaining ones. The guiding principle of designing contingency plans should be to first aim at resolving issues at the point of problem itself, by virtue of training to operators and FPS owners and providing detailed yet simple operation manuals. If the issue cannot be resolved, then backup measures should be used to ensure that there is no denial of service to beneficiaries. This may result in manual operations



or cost to the state to repair equipment, resulting in avenues for system inefficiencies (such as leakage etc.), but the advantage of implementing technological solutions far outweighs the short term problems with operations of devices.

Contingency planning should cover two categories:

1. System related contingencies (issues with machine operations or machine breakdown, software or hardware issues, electricity or data connectivity failures etc.):
  - Implementation phase: Detailed surveys on electricity and data connectivity for all FPS should be undertaken to determine feasibility for operations. In case of significant gap from desired availability and reliability levels, backup measures should be taken, such as installing solar powered generators for electricity backup and Real-time MIS for operations management and system

improvement Beneficiary handed over ration card and ration allotment activated

#### Figure 10: Schematic Of Recommended Solution – End-to-end Design

Recommended TPDS solution combines best practice solutions for each value chain segment installing WiMAX towers or dedicated broadband line for data connectivity.

- Operations phase: To counter the diverse range of potential operating issues, a detailed contingency plan is required. For situations where data connectivity is temporarily unavailable, devices and computers should store the data in offline mode, followed by a batch upload of data when connectivity resumes. In case of unavailability of electricity, power backup for computers and rechargeable batteries for devices is recommended. In case of device breakdown, quick corrective action is needed to repair or replace the device, while

temporarily using manual mode of operations for convenience of beneficiaries.

2. Process related contingencies (e.g. poor fingerprints, multiple persons with same name in household, insufficient stock levels at warehouse, lack of sufficient transportation to FPS, PoS operations etc.):
  - During beneficiary digitisation and enrolment, contingency measures must be in place to account for a variety of scenarios that take place, to ensure that beneficiaries are not caused inconvenience and elimination of beneficiaries from the lists is done only after proper verification.
  - For supply chain operations, it is critical that orders be dispatched on time and notifications reach the beneficiaries, with proper verification of the delivery at the FPS. In case automated or electronic systems are not working, a manual procedure must be put in place to ensure that operations are not hampered and

food grain availability is maintained at the FPS as far as possible.

- At the FPS, it should be the primary aim to ensure that the beneficiaries get their intended food grains, regardless of the situation. Hence, contingency measures must be built in for FPS operations which account for any adverse situations while ensuring that all data is ultimately logged on to the MIS which forms the basis for subsequent month's allocation to the FPS.

All occurrences of contingency scenarios should be logged onto the MIS, which can be tracked and analysed to prevent misuse of the contingency scenarios and take corrective action. Recurring problems observed can also be addressed with permanent operational solutions, such as installing additional backup infrastructure.

Additionally, incentives for all stakeholders should be designed in such a way as to reduce the potential gain from indulging in malpractices or bypassing standard procedures and protocols for

operations. Linking all payments through a central system with visibility and authentication of data is a key method to achieve this, apart from others.

Detailed contingency plans have been developed for all aspects of the solution design under system related contingencies and process related contingencies, which can be made available on request.

### 3.12 FLEXIBILITY TO POTENTIAL ECOSYSTEM CHANGES

The proposed Solution is highly adaptable to a range of potential changes in the ecosystem, as is described below. The flexibility of the solution stems from having modularity among components – there is no process that is locked down with regards to information or change. Since all systems are managed centrally, the modification needs to happen only at one location and not requiring a complete overhaul for every change. Lastly, since the entire system is recommended to be operational online, the changes can be

synchronised in real-time without significant amount of efforts on part of the stakeholders.

The NFSA (2013) has significant impact on the TPDS e.g. change in percentage of population covered, changes in classification and per-person allotment of food grains. The proposed solution can easily adapt to these and other potential changes in the future. The online system based on Aadhaar enrolment can scale up to cover all beneficiaries. Classification is mapped online and can be easily modified centrally. Information is stored for Figure 12: Overview Of Solution Flexibility Towards Potential Future Changes in TPDS

Best practice solution is flexible to adapt to potential changes in TPDS ecosystem Ecosystem individuals (Aadhaar number); hence per person allotment can be implemented while the dynamic supply chain can also support diversifying of the food grains under TPDS wherever required.

Direct Benefit Transfer (DBT), if considered would involve electronic transfer of subsidy into the account of either the FPS owner or beneficiary based on the actual off take and transaction history. This technical modification can be easily added onto the TPDS Best Practice Solution as transaction history for each FPS and beneficiary/ration card is already recorded by the electronic PoS device and uploaded to central systems after biometric authentication.

In conclusion, the proposed TPDS Best Practice Solution can address all major issues facing the TPDS currently, but requires a focused effort over time from the state governments and all stakeholders to ensure proper implementation to yield benefits.

#### 4. Implementation Plan

A detailed implementation plan has been developed for the recommended Best Practice Solution. The implementation plan provides

indicative project timelines, roles and responsibilities for different stakeholders, details of IT systems, MIS design as well as implementation of best practices. A brief overview of these major components is described below. Specific elements of the implementation plan will vary from one location to another and some customisation for the specific environment and goals of the state will be required.

#### 4.1 IMPLEMENTATION TIMELINES

The recommended prototype would take approximately 24 months to be implemented. This includes end-to-end strengthening of the TPDS, assuming the starting point to be a district with no modernisation efforts. If the chosen district has already implemented certain activities, the time taken will be adjusted accordingly. Implementation of the solution has been divided into two phases:

1. Planning Phase Prior to launching, a set of activities needs to be carried out to ensure proper preparation and to modify the recommended



solution to best suit local conditions and implementation goals. These activities are expected to typically take approximately six months. The activities include selecting implementation partners, vendors, setting up project management teams and conducting field surveys. These will allow the authorities and stakeholders to have a significantly better understanding

Figure 13: Estimated Timelines For Implementation Of Recommended Solution Across One District of the ground conditions and requirements for implementation.

2. Implementation Phase Having established tie-ups with partners and vendors and understanding the location specific requirements, implementation of the TPDS Best Practice Solution can commence.

It is recommended that all activities are carried out simultaneously, so as to reduce overall time taken while also facilitating field trials at the overall system level. The activities for each value chain component as listed in Figure 13 include

need to be established with UIDAI to enable access to their data and biometric authentication platform. The state Food Departments will also need to build internal capabilities and significant training will be required for all officials, operators and stakeholders.

Figure 14 provides an overview of the recommended organisational roles and responsibilities of different TPDS stakeholders during the implementation phase.

Figure 14: Recommended Organisational Roles And Responsibilities For Implementation Of The TPDS Best Practice Solution

A strong partnership between key stakeholders will be essential for the success of the demonstration project

## 5. Financial Feasibility

In order to ensure the sustainability of the implemented solution, financial viability is very

important. An overview of the costs and potential savings from the TPDS Best Practice Solution is provided below:

### 5.1 ESTIMATION OF COSTS

The costs for implementation were estimated using data from a variety of sources. The process included benchmarking against existing TPDS pilots in various states, feedback on costs from relevant TPDS stakeholders and vendors, accompanied by secondary research leveraging reports, research and prior project management experience.

Total costs of implementation are estimated for a sample district based on the average operating environment of a typical district in India (median size of 15 lakh (1,500,000)<sup>21</sup> people having 3 lakh (300,000)<sup>22</sup> ration cards covering 630 FPS<sup>23</sup> and three warehouses<sup>24</sup>, with a district Food Department office overseeing operations).

The cost for the proposed Solution was structured under two categories:

- One-time setup cost – initial costs required for installation of system and setting up for launch. These costs are one time investment and will form the backbone of all operations. The major expenditures here include hardware and infrastructure, IT systems, contracts with vendors & external agents, training of stakeholders and overall project management apart from other expenses.
- Recurring operating cost – annual operating costs required for a fully functional end-to-end TPDS solution for the sample district. These costs will be borne annually by the state. The major expenditures here include maintenance of devices, transportation (doorstep delivery), utility costs, contracts with vendor or external agencies and overall on-going operations team among other expenses.

As was the case with implementation timelines, cost estimates will require customisation to the district's requirements and will vary according to prevalent conditions, geography, number of beneficiaries and FPS etc.

Additionally, the costs indicated here are for a pilot project in one district of the state. If and when the solution is scaled up across multiple districts, one-time setup cost per district would decrease by approximately 10%<sup>25</sup> owing to the fact that certain software, IT systems and infrastructure can be re-used for a large number of districts.

Also, it is recommended that the states leverage existing NIC platforms for software and IT systems (e.g. Common Application Software) to ensure standardisation and reduce development costs where possible. The total one-time setup cost for a district is estimated to be Rs. 3.6 – 4.4 crore (USD 600,000 – 730,000) covering all value chain components, while the recurring operating cost are estimated to be Rs. 3.6 - 5.2 crore (USD 600,000 –

867,000) per district per annum<sup>26</sup>. Approximately Rs 2 – 3.5 crore (USD 330,000 – 580,000) per annum of the recurring operating costs are direct and indirect incentives to improve FPS viability which is essential for the sustainability of the solution. These incentives are in the form of PoS based transaction linked incentives of Rs 5 per ration card transacted through the PoS per month (Rs 1.6 crore/ USD 267,000 per annum) and doorstep delivery (Rs 0.4 – 1.9 crore/USD 67,000 – 317,000 per annum). The distribution of these costs is given in Figure 15.

For the total one-time setup cost for atypical district, it is estimated that:

- Rs. 0.3 crore (USD 50,000) will be required for digitisation and enrolment
- Rs. 0.5 – 1.0 crore (USD 83,000 – 167,000) required for supply chain operations (depending upon cost of weighbridges)
- Rs. 2.1 crore (USD 350,000) required for FPS operations (largely to purchase PoS devices)

- Rs. 0.1 crore (USD 16,700) required to set up the grievance redressal system
- Rs. 0.3 – 0.6 crore (USD 50,000 –100,000) required for the IT system (depending upon choice of state to leverage existing NIC platform)
- Rs. 0.2 crore (USD 33,000) required for monitoring and evaluation of the implementation

For the recurring operating costs for a typical district, it is estimated that:

- Rs. 0.2 – 0.3 crore (USD 33,000 –50,000) required for supply chain operations
- Rs. 1 crore (USD 167,000) required for FPS operations 26 For estimation of the recurring cost, it is assumed that only one transaction per card will be considered for incentives; irrespective of multiple transactions to avoid misuse.

Figure 15: Overall Cost Requirements For The TPDS Best Practice Solution

The solution has a one-time cost of Rs. 3.6 – 4.4 crore & annual cost of Rs. 3.8 – 5.4 crore for an average district

- Rs. 0.25 crore (USD 42,000) required for operating the grievance redressal system
- Rs. 0.4 – 1.9 crore (USD 67,000 – 317,000) required for doorstep delivery, depending upon the freight rates in the district
- Rs. 1.6 crore (USD 267,000) required for FPS incentives, given at Rs. 5 per transaction conducted via the PoS to drive adoption of the solution
- Rs. 0.15 crore (USD 25,000) required for running the IT systems annually

The proposed Solution has the potential to bring about significant benefits for the state government, both financial (due to saving of grains) and non-financial (due to improving experience of all stakeholders).



Detailed costing estimates are available for each component, which can be made available on request.

## 5.2 CALCULATION OF FINANCIAL SAVINGS

The recommended solution can realize substantial saving of money for the Food Department, due to:

1. Better targeting of beneficiaries –reduction in number of duplicate and ghost cards (by process of biometric and textual de-duplication and biometrically authorised distribution of cards) results in grain saved which would have otherwise been allocated to bogus cards. In a typical district, it has been observed that 7.4 – 10.9% of existing ration cards are bogus, elimination of which over a base of approximately 3 lakh (300,000) ration cards will amount to grains not being sold through the TPDS, thus saved by the government. This translates into an estimated Rs. 7.3 – 10.7

crore (USD 1.2 - 1.7 million) per district per year<sup>27</sup>.

#### Figure 16: Projected Period For Break-Even Of Investment And Annual Savings For District

Projected period for break-even is 4 – 7 months after launch

Proposed TPDS Solution yields Rs. 3 – 9 Crore in net savings in the first year in one district

2. Proper logging of sales at FPS with biometric authentication – there is significant mismatch found in the actual off-take from FPS and the reported offtake, which occurs due to paper based records which can be manipulated easily. Having all transactions via PoS device with biometric authentication of beneficiaries will drastically reduce such malpractices from the system. In a typical district, it has been observed that actual off-take for APL quota of grains is generally much lower than reported, by a factor of 21% - 34% for the allocated quantity. Proper transaction logging

eliminates scope of misreporting, thus saving equivalent grain amount for the government. This translates into an estimated Rs. 5.7 – 5.9 crore (USD 950,000 – 983,000) per district per year<sup>28</sup>.

Hence, a total of Rs. 13.2 - 16.4 crore (USD 2.2 - 2.7 million) can be saved per district per year by implementing the solution. Accounting for the additional recurring costs mentioned above, a net annual saving of Rs 8.1 – 12.9 crore (USD 1.3 – 2.1 million)<sup>29</sup> is possible in a typical district.

The calculations here are based on average values obtained from field visits and research of existing TPDS issues and pilots. The calculations will vary according to local operating conditions and state specific constraints, but serve the purpose of providing a detailed estimate reflecting typical operating conditions.

### 5.3 BREAK-EVEN ANALYSIS AND PAYBACK ON INVESTMENT

Based on the cost estimated and savings calculations, the investment by the Food

Department will generate enough savings to become financially viable within a period of four to seven months of commencement of full scale end-to-end operations of modernisation. At the higher end, the savings projected at the end of first year of operations could be as high as Rs. 9 crore (USD 1.5 million) for a typical district.

It is recommended that the above savings be invested in increasing margins for FPS owners (an essential implementation requirement) as well as in improving the nutritional content of the TDPS food basket.

Note that the current analysis does not include savings realised due to kerosene sales, inclusion and exclusion errors as well as under-weighting of grains at FPS. Factoring these would increase the quantum of savings.

At the national scale, the proposed TPDS solution could be implemented throughout the country for a one-time investment of Rs 2,500 – 3,000 crore (USD 417 – 500 million). The potential

savings (net of operating costs as well as of incentives that would improve the income of a typical FPS by Rs 3,000 – 5,000 (USD 50 – 83) per month) from a nationwide implementation of this solution are in the range of Rs. 6,500 – 10,000 crore (USD 1 - 1.6 billion) per annum. This is equivalent to nearly 8% - 12% of the country's food subsidy for 2013- 14 and represents a 4 – 7 month payback period. Some of these savings could be reinvested to augment the nutritional value of the TPDS basket of goods.

Analysis from the East Godavari pilot<sup>30</sup> shows that approximately Rs. 45,000 (USD 750) can be saved per month from each FPS due to elimination of bogus cards and Aadhaar based online biometric authentication at the FPS via the PoS device. This saving will accrue to the 28 Mismatch in off-take of APL quota of rice and wheat is significant (21% for wheat, 34% for wheat as observed from field visits and interviews with stakeholders). Eliminating misreporting for APL off-take will save this

mismatch in off-take and sales report each month in each district.

## 6. Conclusion

Addressing TPDS issues by implementing the TPDS Best Practice Solution will yield a number of significant benefits for state governments:

1. Satisfied and empowered beneficiaries The overall experiences of beneficiaries will improve significantly as many features are designed for ensuring proper and quality service to them. The right amount of food grains will be available at the right time for all targeted beneficiaries by virtue of proper identification and ensuring improved operations of the supply chain. By providing the right incentives to the FPS operators, quality of service for beneficiaries should increase as well. Additionally, a proper recourse mechanism for addressing grievances of all stakeholders will resolve any other issues with system performance. WFP also

recommends investing a portion of the savings from solution implementation to augment the nutritional content of TPDS rations as a way of improving the nutritional status of beneficiaries.

## 2. Better aligned FPS operators

FPS serves as the focal point of TPDS operations, hence it is important to provide adequate incentives to improve operating conditions and drive adoption of reforms. Towards this end, increased commissions will result in improved viability for the FPS, while good business practices are incentivised by portability as beneficiaries will prefer to purchase from FPS with higher quality and reliability of service.

Installation of electronic PoS devices reduces the ability to misreport sales and indulge in pilferage thus yielding significant savings for the state government. However, above mentioned incentives are a pre-requisite

for the same; else system may be opposed by FPS owners.

3. Easier and more effective system management for government officials The task of management of the vast TPDS is quite complex for officials and government operators. Providing relevant information in a timely and usable manner is the primary aim of the solution. By implementing recommended systems and developing a robust MIS, reliable and real-time data will be made available to all stakeholders. This can be leveraged for operational improvements and ensuring transparency. The reduced complexity for all stakeholders will thus improve overall satisfaction and reduce complaints.

The recommended TPDS Best Practice Solution combines the best practices observed in a variety of pilots across the nation combined with rigorous research and analysis. It is designed to address all existing critical issues around TPDS including the issue of FPS



viability (essential for the long term sustainability of the solution), while also being adaptable to a wide variety of operating conditions and potential future changes. States need to modify recommendations according to their requirements and operating conditions prior to implementation and also develop detailed system modules, operational guidelines and contingency plans.

Having designed the detailed solution design, WFP will be happy to discuss a partnership with state governments to customise the solution for their needs while helping establish partnerships with vendors and other implementation partners. WFP will also consider partnering with interested states to roll out the recommended solution in pilot districts.

2 Poorvi Marg, Vasant Vihar,  
New Delhi 110 057  
Tel.: +91 11 46554000  
Website: [www.wfp.org](http://www.wfp.org)  
E-mail: [wfp.newdelhi@wfp.org](mailto:wfp.newdelhi@wfp.org)

//True copy//

**ANNEXURE R-22**

UIDAI

Unique Identification Authority of India  
Planning Commission, Yojana Bhavan,  
Sansad Marg,  
New Delhi 110001

Demographic Data Standards and  
Verification procedure  
(DDSVP) Committee Report

Version 1.0  
December 9, 2009

Prepared by: DDSVP Committee

## 1 Introduction

UIDAI has been setup by the Govt. of India with a mandate to issue a unique identification number to all the residents in the country. UIDAI proposes to create a platform to first collect the identity details and then to perform authentication that can be used by several government and commercial service providers. A key requirement of the UID system is to minimize/eliminate duplicate identity in order to improve the efficacy of the service delivery. UIDAI has selected biometrics feature set as the primary method to check for duplicate identity. In order to ensure that an individual is uniquely identified in an easy and cost-effective manner, it is necessary to ensure that the captured biometric information is capable of carrying out the de-duplication at the time of collection of information. For government and commercial providers to authenticate the identity at the time of service delivery, it is necessary that the biometric information capture and transmission are

standardized across all the partners and users of the UID system.

The Government of India, in the past, had set up a number of expert committees for standards to be used for various e-governance applications in areas of Biometrics, Personal Identification and location Codification Standards. These committees have worked out standards in the respective categories to be uniformly applied for various e-governance standards.

As UIDAI proposes to use common demographic data for establishing and verifying identity, it becomes essential to standardize these fields and verification procedure across registrars and to aid interoperability across many systems that capture and work with resident identity.

### 1.1 Definitions and Acronyms

- o UID – Unique Identification
- o UIDAI – Unique Identification Authority of India
- o Authority – Unique Identification Authority of India (UIDAI)

- o DDSVP – Demographic Data Standards and Verification Procedure
- o KYR – Know Your Resident
- o KYC – Know Your Customer
- o PoI – Proof of Identity
- o PoA – Proof of Address
- o DIT – Department of Information Technology
- o ORGI – Office of Registrar General of India
- o VARCHAR – Variable character string as represented in a database. Unlike the fixed-size character type, VARCHAR does not store any blank characters at the end, reducing the size of a database when the full length of the field is not used.
- o UNICODE – Globally accepted standard definition of local language characters in a computer system. Character sets defined by Unicode Consortium.
- o UTF-8 – Unicode Transformation Format, most widely used storage encoding for any UNICODE data

- o Registrar – Any government or private agency that will partner with UIDAI in order to enroll and authenticate residents
- o Introducer – A person who is authorized to introduce a resident who does not possess any supporting documents in order to help them establish UID (see later section 3.3 for details)
- o Flag – a marker to indicate a particular status of a field

## 1.2 Committee Objective

A key requirement of the UID system is to capture necessary demographic data in a standardized manner so that this identity information works across various systems.

1. In order to achieve interoperability of data across various govt. and private agencies that will use the UID system, it is important that the capture and verification of basic demographic data for each resident is standardized across all partners of the UID system.
2. Another important aspect of demographic data collection is to ensure the correctness of the data

at the time of enrolment of residents into the UID System. While an elaborate verification system based on local enquiries and existing documents issued by various agencies can be used to verify the correctness of the data to a large degree, it is likely to result into exclusion of poor and the marginalized who normally do not have any documents to prove their identity and addresses. As the main focus of the UIDAI is on inclusion, especially of the poor, the verification procedure has to be formulated in such a manner that while it does not compromise the integrity of the inputs, it also does not result in exclusion and harassment of the poor.

3. The government of India had set up expert committees for standards to be used for various e-governance applications in areas of Personal Identification, Biometrics, and Location Codification Standards. These committees have worked out few standards on the respective categories to be uniformly applied for various e-governance standards.

4. As UIDAI will use basic demographic data to establish identity and authentication, it becomes essential to review the applicability of the existing data and process standards for various e-Governance applications, modify them for UIDAI specific requirements and frame the methodology for its implementation.

In view of the above, a Demographic Data Standards and Verification Procedure (DDSV) Committee was setup vide OM No.63/DG-UIDAI/2009 dated 09/10/2009 (annexed to this report) to review the existing standards and modify/enhance/extend them so as to achieve the goals and purpose of UIDAI.

### 1.3 Committee Charter

- o To Recommend the Demographic Data standards (The data fields and their formats/structure etc.) that will ensure interoperability and standardization of basic demographic data and their structure used by various agencies that use the UID system. This



will necessitate the review of the existing standards of Demographic Data and, if required, modify/extend/enhance them so as to serve the specific requirements of UIDAI and its partners.

- o To Recommend the Process of Verification of these demographic data in order to ensure that the data captured, at the time of enrolment of the Residents into the UID system, is correct.

#### 1.4 Target Audience

Any person or organization involved in designing, testing or implementing UID system, UID compatible systems, or UID enrollment for the central government, state government, commercial organizations, or any users of the UID system.

## 2 KYR Demographic Data

### 2.1 Introduction

Purpose of UIDAI is to help Residents establish their identity. So, it is important that the KYR data is kept to a usable minimum so as to support goals of UID and avoid other profiling and transactional fields.

### 2.1.1 Names and Addresses

Names in India can be from a single word to many (sometimes even 5 or more) words long depending on the region, caste, religion, etc. A standardized structure for names needs to be created for common KYR and interoperability between various systems.

Similarly, we neither have a standardized address format nor have well defined geographic boundaries beyond villages. This creates issues when trying to map addresses in a standard way. Various forms issued by existing registrars vary greatly when it comes to capturing addresses. As part of this committee, address structure for residents will also be standardized.

### 2.1.2 UID Number Format

The rationale for adopting UID numbering scheme was explained to the committee by UIDAI which is given below:

UID number is a 12-digit number with no intelligence built into it – it should be a random number, with as few digits as possible to accommodate the identification needs of the population for the next 100-200 years. UID number will be assigned only after biometric de-duplication process of the data supplied by the registrars.

The following factors were considered in order to arrive at a design of the UID number.

1. The date-of-birth and other attribute information should not be embedded in the UID number. Similarly, place of birth/residence using administrative boundaries (state/district/taluk) should not be embedded in the UID number. When state/district IDs are embedded in the UID number, the number faces the risk of becoming invalid and misleading the authenticator when people move from place to place. It can also lead to profiling/targeting based on the region/state/district that a person is from.

The approach of storing intelligence in identification numbers was developed to make

filing, manual search and book-keeping easier prior to the advent of computers. This is no longer necessary, since centralized database management systems can index the records for rapid search and access without having to section data by location or date of birth.

2. Given the rapid penetration of mobile phones and landlines across the country and across economic groups, the phone could become an enabling device used for authenticating a person, especially in the village scenario where internet penetration is still very small. In this case it would be useful to keep the UID number as a number rather than an alphanumeric.
3. Packing Density is the ratio of valid UID numbers issued to the total number of possible UID numbers available given a certain number of digits. The lower the packing density is, the more likely it is that a random guess will not produce a valid assigned UID number. In general it is suggested that we keep the packing density to about 20%.

4. The Authority intends to assign UID numbers to all residents – more than a billion people. UID number will not be re-used and hence numbering scheme need to accommodate necessary population growth over the years.

This committee has taken note of the above.

## 2.2 UID for Children

All children will be assigned a UID number. It is very important for several service organizations such as education and health to be able identify children uniquely in order to deliver services effectively. Children's' fingerprints are not fully formed and hence cannot be used for de-duplication given current state of technology.

Hence during enrollment, details of the parents are captured in order to link the child to established UIDs so that either of the parents can be used to authenticate the child. When the child's biometrics are well-formed (as per biometric committee recommendations), biometric capture will take place and the child will be de-duplicated to ensure the

uniqueness of the child. Until the child is biometrically de-duplicated, their UUIDs will be flagged as "De-duplication not performed".

### 2.3 Data Fields Summary

Information	Fields	Mandatory / Optional	Data Type
Personal Details	Name	Mandatory	Varchar (99)
	Date of Birth##	Mandatory	Date
	Gender	Mandatory	Char (1) - M/F/T
Address Details	Residential Address	Mandatory	8 address lines and pin code.
Parent / Guardian Details	Father's/Husband's /Guardian's Name*	Conditional	Varchar (99)
	Father's/Husband's /Guardian's UID*	Conditional	Number (12)
	Mother's/Wife's /Guardian's Name*	Conditional	Varchar (99)
	Mother's/Wife's /Guardian's UID*	Conditional	Number (12)
Introducer Details	Introducer Name**	Conditional	Varchar (99)
	Introducer's UID**	Conditional	Number (12)
Contact Details	Mobile Number	Optional	Varchar (18)
	Email Address	Optional	Varchar (254)
## A flag is maintained to indicate if Date of Birth (DoB) is verified, declared, or approximate.			
* For infants, Father/Mother/Guardian's name (at least one) and UID is mandatory.			
* For children under a particular age, biometric de-duplication will not be done. Hence their UID will be flagged as such until they are biometrically de-duplicated at a later age (see section on UID for Children). Their UID will be linked to at least of the parent's UID.			
* For adults, Name of either Father/Husband/Guardian or Mother/Wife/Guardian is mandatory. But, an option will be provided to not specify in the case the adult is not in a position or does not want to disclose.			
** For residents with no document proof, an "introducer" should certify his/her identity. See later section on Introducer System.			

Table 1: Data Fields Summary

### 2.4 Data Fields in Detail

## 2.4.1 Unique ID

Field Name	UID
Data Type	Number (12)
Mandatory / Optional	Mandatory
Specification Owner	UIDAI
Valid Values and Default Value	---
Language Support	---
Description	Internal generated random number. Unique in the whole system.
Display and Print Specifications	Print and display format should be NNNN-NNNN-NNNN

## 2.4.2 Name of Resident

Field Name	NAME
Data Type	Varchar (99)
Mandatory / Optional	Mandatory
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Field Name	NAME
Language Support	Yes. Other than English, it will also be stored in one official Indian language. Data storage will be based in UTF-8. An additional Indian language code (Indian language codes as specified under DIT standards) will also be maintained for transliteration purposes. Specific guidelines such as handling "matras" on hand-written forms will be provided by UIDAI as part of registrar on-boarding

	process.
Description	Name of the resident.
Display and Print Specifications	---

### 2.4.3 Date of Birth

Field Name	DOB
Data Type	Date
Mandatory / Optional	Mandatory
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	---
Description	Date of Birth of the resident.
Display and Print Specifications	Print and display format should be DD/MM/YYYY

#### 2.4.3.1 Date of Birth Type

Field Name	DOB_TYPE
Data Type	Char (1)
Mandatory / Optional	Mandatory
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	"V" - Verified (full DoB as per document) "D" - Declared (full DoB as declared by resident) "A" - Approximate (Just the year, based on estimated age)
Language Support	---
Description	Flag used to indicate DoB type.
Display and Print Specifications	---

### 2.4.4 Gender

Field Name	GENDER
Data Type	Char (1)
Mandatory / Optional	Mandatory



Specification Owner	ORGI
Valid Values and Default Value	"M" – Male, "F" – Female, and "T" – Transgender
Language Support	---
Description	Gender of the resident
Display and Print Specifications	---

#### 2.4.5 Residential Address

Field Name	RESIDENTIAL_ADDRESS
Data Type	Address (see address structure details below)
Mandatory / Optional	Mandatory
Specification Owner	Dept. of Post
Valid Values and Default Value	---
Language Support	Yes. Other than English, it will also be stored in one official Indian language. Data storage will be based in UTF-8. An additional Indian language code (Indian language codes as specified under DIT standards) will also be maintained for transliteration purposes.
Description	A verifiable address where resident lives normally.
Display and Print Specifications	Format should be (empty values/lines not printed): C/o Person Name Building Street Landmark, Locality Village/Town/City, District State – Pin Code

##### 2.4.5.1 Address Structure

CARE_OF	Field to capture "C/o" person name	Varchar (60)	Optional
---------	------------------------------------	--------------	----------

BUILDING	Door/House/flat/Bldg number and name	Varchar (60)	Mandatory
STREET	Street number and name	Varchar (60)	Optional
LANDMARK	Major/Minor Landmark	Varchar (60)	Optional
LOCALITY	Locality/Area/Suburb /Sector/Block	Varchar (60)	Optional
VILLAGE_TOWN_CITY	Village/Town/City	Varchar (8) for code and Varchar (50) for name (stored as code*)	Mandatory
DISTRICT	District	Varchar (4) for code and Varchar (50) for name (stored as code*)	Mandatory
STATE	State	Varchar (2) for code and Varchar (50) for name (stored as code*)	Mandatory
PINCODE	Postal code for an area	CHAR(6)	Mandatory
COUNTRY	Country. Currently not used on forms.	Varchar (3) for code and Varchar (50) for name (stored as code*)	Mandatory
* All region codes are based on "Land Codification" from ORGI			

#### 2.4.6 Father/Husband/Guardian and Mother/Wife/Guardian Information

Field Name	NAME and UID
Data Type	Same as Name and UID
Mandatory / Optional	Name of either Father/Husband / Guardian or

	<p>Mother/Wife/Guardian is mandatory for all. But, an option will be provided to not specify in the case the adult is not in a position or does not want to disclose.</p> <p>In the case of children, both Name and UID of at least one parent/guardian is mandatory.</p>
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	Yes. Other than English, it will also be stored in one official Indian language. Data storage will be based in UTF-8. An additional Indian language code will also be maintained for transliteration purposes.
Description	Name and UID of parent/guardian.
Display and Print Specifications	---

#### 2.4.6.1 Relationship Type

Field Name	RELATIONSHIP_TYPE
Data Type	Char (1)
Mandatory / Optional	Mandatory when Parent/Spouse/Guardian data is provided
Specification Owner	UIDAI
Valid Values and Default Value	"F" – Father, "M" – Mother, "H" – Husband, "W" – Wife, and "G" – Guardian
Language Support	---
Description	Flag used to indicate. Two separate flags will be stored in database – one for Father/Husband/Guardian and another for Mother/Wife/Guardian.
Display and Print	---

## Specifications

## 2.4.7 Introducer Information

Field Name	INTRODUCER_NAME and INTRODUCER_UID
Data Type	Varchar (99) and Number (12)
Mandatory / Optional	Optional
Specification Owner	UIDAI
Valid Values and Default Value	---
Language Support	---
Description	In the case of residents having no documents as proof, they can be "introduced" by any approved "introducer" (see KYR process chapter for details on introducer system). Both Name and UID will be captured in form although only Introducer UID will be stored against resident record.
Display and Print Specifications	---

## 2.4.8 Mobile Number

Field Name	RESIDENT_PHONE
Data Type	Varchar (18)
Mandatory / Optional	Optional
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	---
Description	Mobile phone number of the resident. This can be used for enhanced authentication and alerting. Landline also will be accepted if mobile

	number is not available.
Display and Print Specifications	---

#### 2.4.9 Email Address

Field Name	RESIDENT_EMAIL
Data Type	Varchar (254)
Mandatory / Optional	Optional
Specification Owner	DIT (MDDS Standard)
Valid Values and Default Value	---
Language Support	Yes.
Description	Email address of resident.
Display and Print Specifications	---

### 3 KYR Verification Procedure

#### 3.1 Introduction

It is essential that key demographic data is verified properly so that the data within UID system can be used for authentication of identity by various systems. There are 3 distinct methods of verification:

- Based on supporting documents
- Based on introducer system (see section 3.5 for details)
- Based on the NPR (National Population Register) process of public scrutiny

All the above forms of verification are acceptable for UID enrollment.

At a high level the 'Personal Details' and the 'Address Details' are mandatory, whereas the 'Parent/Guardian', 'Introducer' and 'Contact' details are optional or conditional.

In order to verify the correctness of certain mandatory fields, such as Name, date-of- birth and address, there is a concept of 'Proof of Identity' (PoI) and "Proof of Address" (PoA). PoI requires a document containing the resident's name and photograph, whereas the PoA contains the name and address.

### 3.2 Broad Principles of Verification

One of the key goals of the UID system is to be inclusive and ensure every resident is able to establish their identity. There are certain key principles that verification procedure will follow to ensure inclusiveness without compromising data quality.

1. Ease of access
2. No harassment
3. No discrimination

4. No corruption

5. No exclusion

### 3.3 Verification Summary

Personal Details	Name	Yes	o Any of the PoI documents. o Introducer for people who have no documents.
	Date of Birth##	No	---
	Gender	No	---
Address Details	Residential Address (for UID letter delivery and other communications)	Yes	o Any of the PoA documents. o Introducer for people who have no documents. o Address will be physically verified during UID letter delivery. But, resident's physical presence not required during letter delivery.
Parent / Guardian Details	Father's/Husband's / Guardian's Name*	Conditional	o No verification of Father/Husband/Guardian in the case of adults.
	Father's/Husband's /Guardian's UID*		
	Mother's/Wife's /Guardian's Name*	Conditional	o No verification of Mother/Wife/Guardian in the case of adults.
	Mother's/Wife's /Guardian's UID*		
Introducer Details	Introducer Name**	Yes	o Introducer's Name, UID on the form. o Physical presence of the introducer at the time of enrollment may not be practical. UIDAI will therefore suggest alternate methods to overcome this practical difficulty.
	Introducer's UID**		
Contact Details	Mobile Number	No	---
	Email Address	No	---
## A flag is maintained to indicate if Date of Birth (DoB) is verified, declared, or approximate.			
* For infants, Father/Mother/Guardian's name (at least one) and UID is mandatory. For adults, Name of either Father/Husband/Guardian or Mother/Wife/Guardian is mandatory.			
** For residents with no document proof, an "introducer" should			

certify his/her identity. See later section on Introducer System.

### 3.4 KYR Guidelines

Following are the main guidelines for KYR process.

- o Uniform process - A uniform procedure for KYR process & verification to be followed by each registrar that is easy to implement. Once a resident obtains a UID from any one of the registrars in the UID ecosystem; all other registrars will honor the validity of the UID fields obtained through the KYR process described in this document. This can eliminate cost involved in repeated KYR verification by several registrars.
- o Multiple options for supporting documents - Applicants will be given a choice of supporting documents that they can produce as PoI and PoA. See later sections for supported list of documents.
- o Lack of Supporting Documents - A process for enrolling residents who have no documented PoI



and PoA must be defined through a concept of "Introducer". For details, please see section on Introducer System.

- o Supporting documents in regional languages
  - The UID backend system will support the capture and storage of data in 2 languages - English and one official Indian language. Enrolling agencies must be prepared to verify and accept supporting documents that carry information in local languages.
- o Archiving Form & Supporting Documents - Clarity in how the forms and supporting documents are archived for later access (dispute resolution, error in data entry etc) should be defined and followed across all enrolling registrars. Detail guidelines regarding this will be issued by UIDAI separately.
- o Accepting changes in demographic information - Some of the fields captured during UID enrollment could change - such as Name and address. An update process will be supported in order to facilitate this. Upon

following this process, the registrars will accept changes in demographic details. See later sections for details.

### 3.5 Introducer System

There are several situations, especially in the case of poor, where they are unable to provide any supporting documents. Since the main goal of UIDAI is inclusion, it is important that an effective process is developed to identify them and give a UID number without harassment.

An approach is to use a network of "approved" introducers who can introduce a resident and vouch for the validity of resident's information.

Essentially, this idea has been borrowed from the account opening procedure in the banks. When someone opens an account in the bank without any proofs, he/she needs an "introducer". This introducer is someone who already has an account in the branch and is ready to certify that X who wants to open the account is indeed X. Logically, then a branch has a

chain of introducers. Every account that has been introduced is linked to the introducer.

This analogy needs to be generalized and expanded to become applicable to UID registration process. In the UID registration process, registration is proposed to be done through various registrars like the Banks, Insurance Companies, Central and State Government Departments. In each of these institutions, the introducer concept will work like a "tree structure" where one introducer may introduce more than one person. However, someone needs be the first introducer and be the "root" of this tree. The person at the root will be the person who will be "self-introduced". In other words, that person will be initially registered without any introducer. He will then introduce and get a number of persons registered. This process will then continue.

As an example, in a registration process where State's Rural Development Department is the registrar and NREGA is the scheme whose beneficiaries are being registered. In this process, the District Magistrate (or the Deputy Commissioner) can

"self-introduce" and become the root of the introducer tree. He/She will introduce his/her BDOs and the Block Panchayat heads (known as Block Pramukhs in some states) who implement NREGA. Each of these BDOs and Block Pramukhs can introduce other people at the Panchayat level like the Panchayat Sewaks, Pradhans/Mukhias (elected Panchayat Head), and ward members (in a village Panchayat). Generally, the last category will reach down to the village level. However, in order to ensure that the enrolment process is not hampered by the lack of approved introducers at the ground level, each registrar should have the freedom to decide on the issue of approved introducers so as to ensure that there are people at the ground level who are able to introduce the people who want to enroll in the UID system.

Similarly in a banking environment, senior bank officials will be able to introduce the lower functionaries and this will go down to the customer level.

In effect, there will be several approved 'introducers' who can help residents without supporting documents to enroll for a UID. Having multiple introducers within and outside government agencies should provide a needy resident access to people who can assert their identity while minimizing harassment. However, the concept of inclusiveness should not take away the credibility of the introducer system. As of now, offenses of impersonation (by the person) or abatement of this offense (by the introducer) should therefore be dealt with within the existing legal framework. However, UIDAI should put in place its own legal framework to deal with such situations as early as possible.

#### 3.5.1 Goals of Introducer System

- o Provide every resident having no documented proofs to provide an alternate method to confirm their identity and address.
- o Ensure availability of multiple introducers so that residents are not being harassed by a single person.

- o Since registrars provide the list of introducers, ensure that the introducer network spans people from Govt. and Private (e.g., Banks) and NGO agencies.
- o Avoid disputes and fraud by making sure that introducers have their UID created before becoming an introducer and all introducers must be registered as such.

### 3.5.2 Broad Guidelines for Creating Introducers List

This section covers broad guidelines that can be used by registrars for creating a list of introducers within their domain. Following are some of the guidelines:

- o The list of approved introducers should go down till the village/customer level so that the process of registration is not hampered due to lack of introducers.
- o The registrars need not keep the hierarchy of approved introducers limited to their own department/organization. As an example, in NREGA, there are a number of NGOs involved in

NREGA social audit and the registrars could make some of the representatives of these NGOs who work at the village level as the approved introducers. Similarly, the village teachers and postman could also be incorporated as approved introducers by state Governments if required.

- o At the ground level, residents should have access to multiple introducers so as to avoid harassment by a single introducer.
- o Introducer list should include credible organizations which have traditionally been advocates of vulnerable communities to make sure goal of inclusion is truly achieved.

### 3.5.3 Introducer System in Detail

As discussed earlier, UIDAI will request registrars to provide a list of people who can act as trusted introducers within their ecosystem. It is highly recommended that this list includes people from both government and private enterprises including NGOs if necessary so that residents get a choice of people to approach for getting the

introduction done. UIDAI may also provide its own list of introducers to make the pool of introducers large enough.

All introducers are required to be enrolled into UID system and obtain their UID number before they can become an introducer. This helps in effectively auditing all introductions.

Residents with no document proofs can approach any of the introducers enlisted to assert their identity. Residents are required to fill up the enrollment form and take it to one of the introducers for getting introduced. Introducer will verify the information filled, fill up his/her name and UID, and put thumb impression within the specified area of the form.

UIDAI should, in consultation with its various Registrars, come out with a detailed policy and guideline for the Introducer. This will be in the form of a Manual to be followed by the various stakeholders.

### 3.6 Supporting Documentation



During enrolment, the quality of data has to be ensured primarily with supporting documents that the resident provides. Copies of documents provided will be verified against the original. Physical copies of the documentary evidence will be stored by the Registrar and available for audit by the designated audit agencies.

In the case of residents with no documentation, introducer system can be used to enroll them into the system.

UIDAI and Registrars shall have the authority to amend and enlarge the list of PoI and PoA documents as and when necessary.

### 3.6.1 Proof of Identity (PoI) Documents

Proof of Identity document must contain name and photo of the resident. Any of the following PoI documents are supported:

Supported PoI Documents Containing Name and Photo

1. Passport

2. PAN Card
3. Ration/PDS Photo Card
4. Voter ID
5. Driving License
6. Government Photo ID Cards
7. NREGS Job Card
8. Photo ID issued by Recognized Educational Institution
9. Arms License
10. Photo Bank ATM Card
11. Photo Credit Card
12. Pensioner Photo Card
13. Freedom Fighter Photo Card
14. Kissan Photo Passbook
15. CGHS / ECHS Photo Card
16. Address Card having Name and Photo issued by Department of Posts
17. Certificate of Identity having photo issued by Group A Gazetted Officer on letterhead

Table 3: PoI Documents

NOTE: If any of the above documents submitted do not contain the photograph of the resident, then it

will not be accepted as a valid PoI. In order to be inclusive and free of harassment, documents with older photographs are acceptable.

### 3.6.2 Proof of Address (PoA) Documents

Proof of Address document must contain name and address of the resident. Any of the following PoA documents are supported:

#### Supported PoA Documents Containing Name and Address

1. Passport
2. Bank Statement/Passbook
3. Post Office Account Statement/Passbook
4. Ration Card
5. Voter ID
6. Driving License
7. Government Photo ID Cards
8. Electricity Bill (not older than 3 months)
9. Water Bill (not older than 3 months)
10. Telephone Landline Bill (not older than 3 months)
11. Property Tax Receipt (not older than 3 months)
12. Credit Card Statement (not older than 3 months)

13. Insurance Policy
14. Signed Letter having Photo from Bank on letterhead
15. Signed Letter having Photo issued by registered Company on letterhead
16. Signed Letter having Photo issued by Recognized Educational Institution on letterhead
17. NREGS Job Card
18. Arms License
19. Pensioner Card
20. Freedom Fighter Card
21. Kissan Passbook
22. CGHS / ECHS Card
23. Certificate of Address having photo issued by MP or MLA or Group A Gazetted Officer on letterhead
24. Certificate of Address issued by Village Panchayat head or its equivalent authority (for rural areas)
25. Income Tax Assessment Order
26. Vehicle Registration Certificate
27. Registered Sale / Lease /Rent Agreement

28. Address Card having Photo issued by Department of Posts

29. Caste and Domicile Certificate having Photo issued by State Govt.

Table 4: PoA Documents

### 3.6.3 Proof of Date of Birth (DoB) Documents

Proof of DoB document must contain name and DoB of the resident. Any of the following documents are supported:

Supported Proof of DoB Documents

1. Birth Certificate
2. SSLC Book/Certificate
3. Passport
4. Certificate of Date of Birth issued by Group A Gazetted Officer on letterhead

Table 5: Proof of DoB Documents

## 3.7 KYR Process

### 3.7.1 Verifying Name

Name must be verified against any one of the PoI documents listed. A copy of PoI should be kept as

part of enrollment and verification should be done against the original document.

In the case of resident not having a valid PoI document, resident should furnish the form signed by any of the approved introducers.

### 3.7.2 Verification for Name Change

Residents may want to change his/her name due to various reasons. Name change should be verified against documents. Following are the reasons and verification method for supporting name changes.

#### Marriage

Women may want to change their name after marriage. In this case, a copy of the marriage certificate or any acceptable proof of marriage as approved by the registrar should be provided and should be verified against original documents.

#### Any Other

Residents may change their name for other reasons such as self-wish, religion change, numerology, etc. In all these cases, they should provide a copy of legal name change certificate and it should be verified against the original document.

### 3.7.3 Verifying DoB

Date of Birth should be verified against any of the Proof of DoB documents listed above. Copy of the document should be verified against the original.

In the case of lack of documents, an approximate DoB may be taken and marked as so.

### 3.7.4 Verifying Address

The addresses will be verified against any one of the PoA documents listed. A copy of PoA document should be kept as part of enrollment and verification should be done against the original document.

In the case of resident not having a valid PoA document, resident should furnish the form signed by any of the approved introducers.

### 3.7.5 Verification for Address Change

Residents can update their address through any of the enrolling registrars. Process for address verification is same as described above.

### 3.7.6 Verifying Parents / Spouse / Guardian Information

In the case children, "Name" and "UID" of one of the parents or guardian is mandatory. Parent/Guardian must bring their UID letter when enrolling children (or they can be enrolled together) and should be verified.

In the case of an adult, no verification will be done for the information on parent or spouse. They are recorded for internal purposes only.

### 3.7.7 Making Corrections to Initial Data

In the case of mistakes such as spelling errors, address errors, etc. resident should be able to come back and request such corrections. Enrolling agencies



should allow making those changes based process similar to initial KYR.

### 3.8 Exceptions Handling

There are likely to be several types of exceptions during enrolment process that need to be handled. Following list provide the common exceptions and appropriate verification method.

Exception	Process
DoB Unknown	Record estimated year of birth leaving date and month fields. DoB Type flag set to "Approximate".
Inconsistent Address in PoA document	Quite like name spelling errors, address too is likely to have a large number of inconsistencies across documents. Addresses must be mapped appropriately onto the standard KYR address fields as per specification.
Absence of original documents	In instances where original documents are not available, copies attested / certified by a public notary / gazetted officer will be accepted.

Table 6: KYR Exceptions List

UIDAI shall have the right to alter / amend the guidelines in this regard from time to time.

#### 4 References

1. "Person Identification Codification (MDDS), Version 1.02" - by Expert Committee on

- Metadata and Data Standards, DIT (<http://egovstandards.gov.in/>).
2. "Land Region Codification, Version 1.02" – by Expert Committee on Metadata and Data Standards, DIT (<http://egovstandards.gov.in/>).
  3. "Master Circular – Know Your Customer (KYC) norms" – by RBI ([http://rbidocs.rbi.org.in/rdocs/notification/PDFs/73IKYC010709\\_F.pdf](http://rbidocs.rbi.org.in/rdocs/notification/PDFs/73IKYC010709_F.pdf))
  4. "UPU S42 International Address Standard" – by UPU (<http://www.upu.int/>). Also see the reference article at <http://xml.coverpages.org/ni2003-06-17-a.html>
  5. "Customer Information Quality Specifications Version 3.0" – by OASIS (<http://docs.oasis-open.org/ciq/v3.0/specs/ciq-specs-v3.html>)
  6. "Markup Languages for Names and Addresses" – OASIS Cover Pages (<http://xml.coverpages.org/namesAndAddresses.html>)

## 5 Members

### 5.1 DDSVP Committee

S.No.	Name & Designation	Role
1	Mr. N. Vittal, Former CVC	Chairman
2	Mr. S. R. Rao, Additional Secretary, DIT	Member
3	Dr. C. Chandramauli, RGI	Member
4	Mr. K. Raju, Principal Secretary, Rural Development, GoAP, Hyderabad	Member
5	Dr. DS Gangwar, Jt Secy., Min of Rural Development, New Delhi	Member
6	Shri Ram Narain, DDG(Security), Dept. of Telecommunication	Member
7	Mr. Vinay Baijal, CGM (DBoD), RBI, Mumbai	Member
8	Mr. VS Bhaskar, Commissioner & Secretary, Health & FW, IT, Sports & Youth Welfare, Government of Assam, Guwahati	Member
9	Mr. S. Satpathy, Secretary, Rural Development, Govt of Jharkhand, Ranchi	Member

10	Ms. Kalpana Tiwari, Department of Posts	Member
11	Prof. Bharat Bhaskar, IIM, Lucknow	Member
12	Mr. Ashutosh Dixit, Jt. Secretary (TPL II), Dept. of Revenue	Member
13	Ms. Madhavi Puri Buch, ICICI Securities, Mumbai	Member
14	Dr. Gayathri V., CEO LabourNet	Member
15	Mr. Ram Sewak Sharma, DG UIDAI	UIDAI Rep.
16	Mr. Srikanth Nadhamuni	UIDAI Rep.
17	Dr. Pramod K. Varma	UIDAI Rep.

### 5.2 KYR Data Sub-committee

S. No.	Name & Designation	Role
1	Shri S.R. Rao, Additional Secy. DIT	Chairman
2	Shri Ashutosh Dixit, JS Dept. of Revenue	Member
3	Shri Chakravarty DDG, RGI Office	Member
4	Dr. D.S. Ganwar, JS, MoRD	Member
5	Shri V.S. Bhaskar, Commissioner and Secy, Health and Family welfare, Govt. of Assam	Member
6	Ms. Renu Bhudiraja, Director, DIT	Member
7	Ms. Aruna Chaba, Senior Technical Director, NIC	Member
10	Shri Ram Sewak Sharma, DG UIDAI	UIDAI Rep.
11	Shri Srikanth Nadhamuni	UIDAI Rep.
12	Dr. Pramod K. Varma	UIDAI Rep.
1	Shri S.R. Rao, Additional Secy. DIT	Chairman
2	Shri Ashutosh Dixit, JS Dept. of Revenue	Member
3	Shri Chakravarty DDG, RGI Office	Member

### 5.3 KYR Process Sub-committee

S. No.	Name & Designation	Role
1	Ms. Kalpana Tiwari, India Post	Chairman
2	Shri Ram Narain, Joint Secy. DoT	Member
3	Dr. D.S. Ganwar, JS, MoRD	Member
4	Shri V.S. Bhaskar, Commissioner and Secy, Health and Family	Member

639

	welfare, Govt. of Assam	
5	Shri Ashutosh Dixit, JS Dept. of Revenue	Member
6	Prof. Bharat Bhaskar, IIM Lucknow	Member
10	Shri Ram Sewak Sharma, DG UIDAI	UIDAI Rep.
11	Shri Srikanth Nadhamuni	UIDAI Rep.
12	Dr. Pramod K. Varma	UIDAI Rep.

(N. Vittal)  
Chairman, DDSVP Committee

//True copy//

**Annexure R-23** (colly)

No. 60/18/74-Estt.(A)  
Government of India/Bharat Sarkar  
Cabinet Secretariat/ Mantrimandal Sachivalaya  
Department of Personnel & Administrative Reforms  
(Karmik aur Prashanik Sudhar Vibhag)

New Delhi-110001, 19th August, 1974.

**OFFICE MEMORANDUM**

Sub: Punctuality of Government offices - Proper observance of Recommendation No. 55 of Administrative Reforms Commission.

The undersigned is directed to say that in the Report of the Study Team on the Machinery of Government of India and its Procedures of Work appointed by the Administrative Reforms Commission, the following recommendations were made:-

"(212) The enforcement of punctuality and order is essentially a hierarchical responsibility. This responsibility should be brought home to all superior officers not only through instructions but also through the pulling up of hierarchical superiors who permit laxity on the part of their subordinates.

(213) The enforcement of punctuality and order should be given first place in the field "administration" by Joint Secretaries (Administration) in unreorganized Ministries and Chief Finance Officers in the reorganized ones. Measures like attendance checking at the entrances, strict enforcement of the provision under which late coming is converted into casual leave, surprise visits to sections to check on attendance, should be ruthlessly undertaken in all Ministries. To assist these functionaries in this important enforcement work, they may be provided with one or two special officers each.

(215) The prevailing evil of the lunch hour not being observed by anybody requires to be dealt with firmly. So far as the office personnel are concerned, it should be the duty of the supervising staff to ensure that the employees stay away for only the permitted period of half an hour. But it may be difficult to ensure this if the right example in this matter is not set by officers."

2. The Administrative Reforms Commission in its report on Personnel Administration had recommended that the above suggestions made by the Study Team relating to enforcement of punctuality may be considered and implemented by the Government vide their recommendation no. 55.

3. The aforesaid recommendations have been accepted by Government. As the Ministry of Finance etc. are already aware, comprehensive instructions have been issued in the Ministry of Home Affairs (Now Department of Personnel & A. R.) O.M. No. 60/17/64-Ests.(A) dated 4th August, 1965 and O.M. No. 46/4/68-Ests (A) dated the 23<sup>rd</sup> April, 1968, regarding observance of punctuality and the steps to be taken for enforcing the same. Those instructions inter alia provided that –

- i) Strict measures should be taken by the administrative authorities for the enforcement of punctuality. Section Officer/Supervisory Officer should be very particular in scrutinizing the attendance registers;
- ii) Surprises daily checks may be carried out in one or two sections of the Ministry/Department/Office under the direct supervision of the senior

officer, like the Joint Secretary in charge of administration or of the Head of Department, as the case may be; and

The lunch hours must be scrupulously observed not only by the Subordinate staff but also by the supervisory officer and periodical surprise checks should be made to ensure this.

The Ministry of Finance etc. are requested to bring those Recommendations of the Administrative Reforms commission as well as the instructions mentioned above to the notice of all administrative authorities under their control, in which punctuality could be ensured and however, be evolved by the Head of offices and Department in the light of the broad objective and general instructions laid down in the matter.

Sd/-  
(P. S. VENKATESWARAN)  
UNDER SECRETARY TO THE  
GOVERNMENT OF INDIA

\*All Ministries/ Deptts. of Govt. of India, including the Deptt. Of Statistics, Department of Atomic Energy and Planning Commission.

\* with usual No. of copies as per distribution list.



MOST IMMEDIATE

No. 28034/8/75-Estt. (A)  
Government of India/Bharat Sarkar  
CABINET SECRETARIAT/MANTRIMANDAL  
SACHIVALAYA

Department of Personnel and Administrative Reforms  
(Karmik Aur Prashasnik Sudhar Vibhag)

New Delhi, the 4<sup>th</sup> July, 1975.

OFFICE MEMORANDUM

Sub: Maintenance of cleanliness in offices and observance of punctuality in attendance by Government servants

Attention of the Ministry of Finance etc. is invited to the Ministry of Home Affairs (now Department of Personnel and Administrative Reforms) O.M. No. 60/17/64-Estt (A), dated the 4th August, 1965, and O.M. No. 46/4/68-Estt (A), dated the 23<sup>rd</sup> April, 1968, regarding observance of punctuality and the steps to be taken for enforcing it. These instructions, inter alia, provide that-

- i) Half a day's casual leave should be debited to the casual leave account of a Government servant for each late attendance but late attendance up to an hour, on not more than two

occasions in a month, may be condoned by the competent authority if he is satisfied that this is due to unavoidable reasons. In case such a course does not ensure punctual attendance, suitable disciplinary action may be taken against the Government servant concerned in addition to this casual leave account on each occasion of such late attendance;

- ii) Strict measures should be taken by the administrative authorities for the enforcement of punctuality and Section Officers and Supervisory Officers should be very particular in scrutinizing the attendance registers;
- iii) Surprise daily checks may be carried out in one or two sections of the Ministry/ Department/ Office under the direct supervision of a senior officer, like the Joint Secretary in charge of Administration or of the Head of the Department as the case may be; and the lunch hour must scrupulously observed not only by the subordinate staff but also by the supervisory

officers and periodical surprise checks should be made to ensure this.

The above instructions were also retreated in the Department of Personnel and Administrative Reforms O.M. No. 60/18/74-Estt(A) dated the 19th August, 1974, in connexion with Recommendation No. 55 of the Administrative Reforms Commission in their report on Personnel Administration, regarding enforcement of punctuality in Government offices.

2. It is presumed that the Ministries/Departments and other Government offices have taken necessary steps to ensure punctuality in attendance and strict observance of the half-hour lunch recess in the offices under their control. It is hardly necessary to emphasize the need for strict compliance with the instructions already issued. In view of the present emergency, the need for toning up the working in offices is all the greater. Ministry of Finance etc. are accordingly requested to ensure that the prescribed working hours in the offices are strictly adhered to by all and the officers and staff do not over stay the prescribed lunch break. It may also be mentioned

that the habitual non-observance of scheduled hours for attending office is highly objectionable and will amount to lack of devotion to duty, thus attracting rule 3(1)(ii) of the Central Civil Services (Conduct) Rules, 1964.

3. In the context of the current Emergency, the need for disciplined conduct in offices and outside, absolute devotion to one's duty and performance of one's role as public servant have assumed greater importance. Accordingly, it is expected that all concerned would put in the maximum possible effort to increase output and efficiency in Government offices. It is expected that officials should not crowd in rooms or corridors and indulge in gossip. Further, the maintenance of proper working conditions and environment has a direct bearing on efficiency and output in Government offices. Every Government can help in this matter, by ensuring that his table and his immediate environment are kept clean and tidy, Suitable measures including periodical inspections, may be taken in this regard by the administrative

648

authorities concerned in the Ministries/Departments and their attached and subordinate offices.

Sd/-

(S. Krishnan)  
Director (Estt)

To  
All Ministries/Departments of the  
Government of India.

No. 28034/8/75-Estt (A) New Delhi dated 4<sup>th</sup> July, 1975.

Copy forwarded to:-

1. The C & A.G. of India, New Delhi.
2. U.P.S.C., New Delhi.
3. Central Vigilance Commission, New Delhi.
4. Commissioner for Linguistic Minorities, Allahabad.
5. All Union Territory Administrations.
6. All Zonal Councils.
7. All attached and subordinate offices of Ministry of Home Affairs and Department of Personnel and Administrative Reforms.
8. All Administrative Sections of the Ministry of Home Affairs and Department of Personnel and Administrative Reforms.

Sd/-  
(S. Krishnan)  
Director (Estt)

No. 28034/10/75-Estt(A)

Government of India/Bharat Sarkar  
Cabinet Secretariat/ Mantrimandal Sachivalaya  
Department of Personnel & Administrative Reforms  
(Karmik aur Prashanik Sudhar Vibhag)

New Delhi, the 27 August, 1975.

OFFICE MEMORANDUM

Sub: Punctual and regular attendance in Government offices – grant of half-a-day's Casual Leave.

Attention of the Ministry of Finance etc. to invited to the Department of Personnel & Administrative Reforms O.M. of even number dated the 4th July, 1975, regarding maintenance of cleanliness in offices and observance of punctuality in attendance by Government servants. These instructions, inter-alia, provide, in the context of the present Emergency, the need for disciplined conduct in offices and outside and absolute devotion to one's duty. The instructions relating to the observance of punctuality in attendance by Government servants were re-iterated in the O.M. under reference. According to the existing instructions, frequent late attendance even with prior permission is not conducive to efficient transaction of work and that

half-a-day's Casual Leave should be debited to the C.L. account of a Government servant – for each late attendance. If a Government servant desires half a day's C.L. in the afternoon, it may be granted to him and the existing practice of leaving office early with permission should cease forthwith.

2. It has further been decided that the case of a Government servant who departs from office early before the time for closing of office, without permission, should also be treated like late attendance and in that case also, half-a-day's C.L. should be debited to the C.L. account for each such early departure from office.

3. Ministry of Finance, etc. are requested to take necessary action as indicated above and also bring the contents of this Office Memorandum to the notice of their employees and to their attached and subordinate offices.

Sd/-

(R.C. Gupta)  
Under Secretary to the Government of India

No. 28034/3/82-Ests(A)  
Government of India/Bharat Sarkar  
Ministry of Home Affairs / Grih Mantralaya  
Department of Personnel & Administrative Reforms  
(Karmik aur Prashanik Sudhar Vibhag)

New Delhi, the 5<sup>th</sup> March, 1982.

### OFFICE MEMORANDUM

Sub: Punctuality in attendance – Action to be taken  
for late-coming.

The undersigned is directed to say that the existing instructions provide for deducting half-a-day's Casual Leave when a Government servant comes late without sufficient justification and the competent authority, while not considering it as a fit case for initiating disciplinary action, is also not prepared to condone the late-coming. Sometimes, it so happens that a Government servant who comes late without sufficient justification has no Casual Leave to his credit and it is not, therefore, possible to debit half-a-day's Casual Leave to his Casual Leave Account. The question has, therefore, been raised by many Ministries and Departments as to how such a situation is to be met.

2. The matter has been examined in consultation with the Ministry of Law, and it has been decided that if an official who has no Casual Leave to his credit,



comes late without sufficient justification and the administrative authority concerned is not prepared to condone the late-coming but does not, at the same time propose to take disciplinary action, it may inform the official concerned that he will be treated as on unauthorized absence for the day on which he has come late, and leave it to the official himself either to face the consequences of such unauthorized absence or to apply for earned leave or any other kind of leave due & admissible for that day, as he may choose. If he applies for earned leave or any other kind of leave due & admissible for the entire day, the same may be sanctioned by the competent authority.

3. The contents of this Office Memorandum may be brought to the notice of all administrative authorities for their information and guidance.

Sd/-

(Kum. S. Trikha)  
Deputy Secretary to the Government of India

To

All Ministries & Departments of the Government of India with usual number of spare copies.

No.13/11/86-JCA  
Government of India  
Ministry of Personnel, Public  
Grievances & Pensions  
(Department of Personnel & Training)

New Delhi the 7<sup>th</sup> Nov., 1986.

Sub: Office timings in administrative offices with the increase of working hours on the basis of the recommendations of the 4<sup>th</sup> Pay Commission.

In the light of the 4<sup>th</sup> Pay Commission's recommendation to the effect that the working hours of the office staff in Government of India should be increased keeping in view the need to maintain and improve the level of productivity and after considering the views of representatives of Central Government employees in this matter, Government has been decided to increase the working hours in the administrative offices of the Government of India from 37 ½ hour per week to 40 hours per week by increasing daily working hours by 30 minutes.

2. Accordingly, the Central Government administrative offices in Delhi/New Delhi will observe, with effect from 17.11.1986, the following timings, namely.

(a)	Ministries/Departments of Govt. of India.	9.00 a.m. to 5.30 p.m. (With lunch break from 1.00 to 1.30 p.m.)
(b)	All other offices of Govt. of India	9.30 a.m. to 6.00 p.m. (With lunch break from 1.30 to 2.00 p.m.)

3. In so far as administrative offices outside Delhi/ New Delhi are concerned, the Central Government Employees Welfare Coordination Committee (where it exists) on the Heads of office (where such a committee does not exist) would have the option to chose any time between 9.00 a.m. to 10.00 a.m. to start their offices, but observe 8 ½ hours working day (inclusive of an obligatory half-an-hour lunch break) in consultation with the concerned Staff Side representatives. It is to be ensured that all the Central Government offices located at one place should have same office timings.

4. Ministry of Finance etc. may inform immediately all the offices/organisations under their administrative control.

655

Sd/-  
(BATA K DEY)  
DIRECTOR (JCA)

To

All the Ministries/Departments of the Govt. of India.

- 1) UPSC/C&AG/Election Commission of Linguistic Minorities/Commissioner for SCs/STs/Backward Classes Commission/Minority Commission/Lok Sabha Sectt./Rajya Sabha Sectt./President's Sectt./Vice president's Sectt. P.M.'s Office/Supreme Court/High Court.
- 2) All attached and subordinate offices of the DOP & Trg. Ministry of Home Affairs.
- 3) Secretary, Staff Side, National Council, 13-C Ferozeshah Road, New Delhi, with 10 spare copies.
- 4) Staff Side Members of the National Council.
- 5) Shri GL Dhar, secretary Staff Side Departmental Council, DP & AR, T-16 INA Colony, New Delhi, with 50 spare copies for distribution among the members of the Departmental Council.
- 6) Chairman/Secretaries, Central Govt. Employees Welfare Coordination Committees.
- 7) Shri B.R.Chavan, Joint Secretary, Ministry of Shipping & Transport.
- 8) Maj. Gen. RN. Kapoor, Chairman, DTC, I.P. Estate, New Delhi.
- 9) Secretary, Railway Board, Rail Bhavan, New Delhi.

656

Copy forwarded to P.I.O. Department of Personnel & Training with the request that the above decision be given wide publicity through All India Radio, all Doordarshan Kendaryas and News Media.

Copy forwarded to all officers and Sections in the Department of Personnel & Training.

(KALI PRASAD)  
Under Secretary to the  
Government of India.

IMMEDIATE

No. 34/6/91-Ad-III  
Government of India  
MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES  
AND PENSIONS  
(Department of Personnel and Training)

New Delhi, the 30 September, 1991.

OFFICE MEMORANDUM

Sub: Observation of punctuality in office.

While conducting surprise checks of attendance, it has been observed, that the instructions regarding observance of punctuality in office are not being followed strictly inspite of repeated instructions issued from time to time in this connection. It has also been noticed that Stenographers, LDC and Group 'D' employees posted with officers are not marking their attendance in the office.

2. Every employee is expected to be in seat and to start work at the prescribed opening hours i.e. from 9.00 a.m. Ten minutes grace may be allowed in respect of the arrival time to cover any unforeseen contingencies. Such late coming (within the grace time) could be condoned, if occasional but it can not be a matter of frequent recurrence.

3. Every employee should enter clearly his initials of the time of arrival and departure duly noting the time in ink. The register should be initialed at the bottom by the Section Officer and in his absence, by the senior most Assistant present, in token of scrutiny. The Register should be sent the Branch Officer 10 minutes after the prescribed arrival time. Any person arriving thereafter should record his initials in the Branch Officers' room.

4. Half a day's casual leave could be debited to the casual leave account of the Government servant for each late attendance up to an hours, but on not more than two occasion in a month, if this is due to unavoidable reasons. Suitable disciplinary action may be taken by the Section Office/ Branch Officer concerned against the Government servant concerned in addition to debiting half a day's causal leave, if the Government servant is persistently/ habitually latecomer.

5. The personal staff (including Stenographers, LDCs and Group 'D' employees) posted with officers will mark their attendance in the attendance register

regularly. The officers-in-charge are requested to ensure that attendance registers are received by them sharp at 9.20 a.m.

6. All Officers and staff members are once again requested to observe punctuality of higher order.

Sd/-  
(JASWANT SINGH)  
UNDER SECRETARY TO THE  
GOVERNMENT OF INDIA.

To

All Officer/ Sections/ Desks in the Department of  
Personnel and Training.

//True copy//



Unique identification Authority of India (UIDAI)  
Planning Commission Government of India

AADHAAR  
COMMUNICATING TO A BILLION  
AN AWARENESS  
AND COMMUNICATION REPORT

Awareness and communication strategy Advisory  
Council (ASCAS)

May 17<sup>th</sup>, 2010

Dear Shri Nandan Nilekani,

The UIDAI constituted the Awareness and Communication Strategy Advisory Council (ACSAC) vide Ar11016/15/10-UIDAI dated February 17<sup>th</sup> 2010.

We are glad to inform you that we have met the objectives set out in the charter. Our deliverables have been encapsulated in this report; AADHAAR - Communicating to a billion - An Awareness and Communication Report.

We would like to thank the UIDAI and the Government of India for giving us an opportunity to work as part of this committee.

We would like to particularly bring to your notice and that of the Government of India the support and valuable contribution provided by Shri R S Sharma, OG and Missson Director, UIDAI.

It was a pleasure working with a very competent and cooperative team, enabling us to deliver the tasks set for us.

We once again thank UIDAI and the Government of India for giving us an opportunity to serve in the council.

Warm Regards,

(Kiran Khalap)  
Chairman ACSAC, on behalf of the ACSAC

. AADHAAR

About the Awareness and communication strategy  
Advisory Council (ACSAC)

- 1) To recommend awareness-and communication strategies for achieving the UIDAI purpose-and communication goals most effectively. These strategies will be translated into tactical plans and -executions by the implementing agencies.
- 2) To recommend any additional research or studies that need to be undertaken to further understand the mindsets attitudes, needs, behaviours, habits etc. of the diverse Indian target audience for the UID. This understanding will help to fine-tune the strategies as well as help in on-ground execution.

The members of the Advisory Council are as follows:

- 1) Shri Kiran Khalap, Co-founder and MD Chlorophyll
- 2) Shri D.K.Bose, Founder Trustee of Center for Advocacy and Research (an NGO working on Media and Gender issues)

- 3) Shri Praveen Tripathi, President- Marketing and Sales Services. Pidilite Industries
- 4) Shri Santosh Desai, CEO, Future Brands
- 5) Shri Sumeet Vohra, Head - Marketing, P&G India
- 6) Two members nominated by UIDAI
  - a. Shri Awadhesh Kumar Pandey, ADG (UIDAI)
  - b. Shri Suranesh Joshi, AOG (UIDAI)
- 7) Shri Shankar Maruwada, Head, Demand Generation, Communication and Awareness UIDAI. Member Secretary of the council

Contents	1
The need for a communication strategy	3
Components of the communication strategy	4
Understanding Aadhaar	5
The Basic Aadhaar Mandate	5
The Developmental mandate of Aadhaar	6
Aadhaar Benefits	7
Implementing Aadhaar	7
Objects of Awareness & Communication Strategy	8
Who the Target Audience	
Introducers	9
Registrars & Enrolment Agencies The Face of Aadhaar	9
Ecosystem	10
Beneficiary –Residents	11
The focus Resident Segments	11
Support Group	13
Branding Aadhaar	13
Aadhaar Brand Equity pyramid	15
Aadhaar Communication Process	16

Need to win at the Three Moments of Truth	20
How communication Channels that Can be used	22
Broadcast	24
Information	25
Outdoor	26
Entertainment	27
Inter-personal	28
UIDAI Support Infrastructure	29
Communication MIX	33
What Messages to be communicated	35
Language Sounds and symbois in	38
Communication for Aadhaar	
Massagers	38
Reassurances	40
Mental Barriers to enforlment	41
Need to Understand Consumer Mental	41
Models	
Measures for communication objectives	42
Enrolments	43
Strength of the brand	43

Usage	43
Review Mechanism	44
Learning Programme for AAdhaar	45
What are the specific Learning Goals	46
How to do this learning	49
What will the learning Agenda Entail	51
Partners for Executing the communication strategy	52
Partners National	54
Partners Regional	54
Research Requirements	54
Primary Data	54
Secondary Data	56
Analytics	56
Appendix	56
About the Brand Logo and Name	57
	58



## THE NEED FOR A COMMUNICATION STRATEGY

The Unique identification Authority of India (UIDAI) was established in 2009 -by the Government of India, with the developmental mandate of setting up the in restructure to provide a universal way of uniquely identifying Indian residents, This is in the form of AADHAAR (Set Appendix for details about brand name and logo), a 12-digit unique identification number (UID) that will be provided after getting the demographic and biometric information of an individual.

A project of this scale requires the creation of a well-planned and detailed communication strategy that can help meet the objectives of the programme. Further, certain key choices have been made to create the UIDAI model that further necessitates the creation of a detailed Awareness and Communication Strategy:

- > ADHAAR will not be mandatory, and will not be enforced on the residents by the UIDAI. Hence, there is a need to create a product whose

benefits are strong enough to create a demand for enrolment

- > AADHAAR will be provided to all residents, hence making this a unique product/service that has to be truly used by each of the 1.2 billions residents

These choices mean that generating demand for enrolment for AADHAAR, educating residents on its benefits, enrolment and usage and creating a long-term brand are inextricably linked to the overall success of the project-Further, there have been; a number of social welfare programmes that are being run by the Government of India and semi-private/private institutions. However, there are now clear gaps that have led to a distancing that has taken place between what the service providers and delivery systems intend to provide and the people who are to receive these services. This is a programme that will make a difference to other welfare programmes.

This apart, one of the key stated responsibilities of the UIDAI is to evolve a clear strategy for

awareness and communication of AADHAAR and its usage.

#### COMPONENTS OF THE COMMUNICATION STRATEGY

A communication strategy should not just be able to provide guidelines on how the communication should reach the end target segments, but also be able to lay out the current understanding of the product/service and the consumer. This is important since the choices made currently are based on this understanding and any new set of choices will require reviewing the current understanding.

The communication strategy here contains:

Understanding of the product/service -  
AADHAAR, through the mandate that drives  
UIDAI and the proposed features

Identifying the stakeholders of the project  
Defining clear objectives based on the mandate  
provided.

Defining the multiple Segments of individuals and understanding, their needs and attitudes with respect to identity

Creating-a brand value proposition based; on product features, stakeholders and the needs and attitudes of the target segments

Identifying the communication Channels that can be used to reach the identified segments.

Defining the messages that need to reach the audience based on key insights of the target.

Identifying challenges with regards to communication

Metrics to measure the performance of the communication strategy

Setting up a feedback and learning mechanism to ensure the communication plan is continuously updated and course correction mechanism brought in when required.

Partners and resources to ensure that the excommunication reaches the audience and is understood.

## UNDERSTANDING AADHAAR

Understanding the features of the product/service that is AADHMR requires us to separate what it inherently is from the services that it will enable. These are reflected in the basic mandate and the developmental mandate that AADHAAR is charged with thus leading us to some of the key end benefits.

### The Basic AADHAAR Mandate

Much of the poor and under served population lack identification documents and AADHAAR may be the first form of identification they would have access to UIDAI has been set up with the following mandate in terms of basic product and service features;

- To provide a unique number to all residents of India, Each resident will be entitled to an AADHAAR.

- Collect basic demographic and biometric information of each individual
- Ensure non-duplication through biometrics
- Offer centralized technology infrastructure providing online authentication services that, can be used across India. The 'anytime, anywhere, anyhow authentication ability will provide the user universality of usage across service providers, across the country

The following table further details the basic product/service features of AADHAAR and clarifies some misconception about the programme.

## Understanding AADHAAR

What AADHAAR is	What AADHAAR Isn't
A number (12 digists)	Another card
For every individual including infants	One per family
Enables identification and is for every resident	Establishess citizenship and is only for Indians
Will collect demographic and biometric information to establish uniqueness of individual	Will collection profiling information such as caste, religion, language
Voluntary	Mandatory
For every resident irrespective of existing documentation	Only for individuals who possess identification documents
Each individual with be given a single unique ID number	Individuals can obtain multiple AADHAARs
UIDAI will enable a universal identity infrastrure that any ID	AADHAAR will replace all other IDs

based application like ration card, passport etc. can use	
UIDAI will give a "Yes" or "No" response for any identification authentication queries	UIDAI information will be accessible to public and private agencies

### The Developmental Mandate of AADHAAR'

The numbers will consequently form the basic, universal identity infrastructure over which registrar and agencies across the country can build their identity based application. These features in turn are expected to serve a developmental mandate to potentially achieve multiple transformational benefits of development and equitable growth, through.

- Residents would be spared the trouble of repeatedly proving identity anywhere in India through documents each time they wish to access services such as obtaining a bank account, passport or driving license.



- This proper identification can lead to better targeting of the developmental scheme provided by the government and the private sector
- Increased reach and efficiency in delivering many goods and services like PDS banking and financial services, telecom health education etc.
- Once residents enroll for AADHAAR service providers may no longer face the problem of performing repeated know your customer (KYC) checks before providing services.

## UNDERSTANDING AADHAAR

### AADHAAR Benefits

Finally, this is expected to benefit the residents in multiple ways, the most important ones being.

- individuals without any form of identification now have an acknowledgment of existence from the Government
- This acknowledgement through AADHAAR will empower poor and underprivileged residents by providing them access to government programmes and the formal banking system.

- AADHAAR will ensure increased trust between public and private agencies, and residents
- AADHAAR will give migrants mobility of identity across the country, which is a challenge even to residents who already have some form of identification.

### Implementing AADHAAR

- The UIDAI will build partnerships with various 'registrars' across the country to enroll residents for the number. Such registrar may include State Governments state or central PSUs, banks, etc. These registrars may turn, partner will enrolling agencies to enroll residents into AADHAAR.
- AADHAAR will also ensure proper verification prior to enrolment, while ensuring inclusion. The UIDAI plans to enroll residents into its database with proper verification of their demographic and biometric information. This will ensure that the data collected is clean from the start of the programme.

(See [http://uidai.gov.in/documents/UID\\_DDSVP\\_Committee\\_Report\\_v1.0pdf](http://uidai.gov.in/documents/UID_DDSVP_Committee_Report_v1.0pdf))

- **Introducer System:** The UIDAI will have a system of introducers to ensure inclusion of those without any identification or residence proof. These Introducers- will be recognized by the UIDAI and will make the AADHAAR programme truly inclusive;
- The Introducers will be required to enroll themselves first and obtain AADHAARs after de-duplication.
- If an applicant is unable to produce documentary evidence, an introducer who knows the applicant will attest to his personal particulars. The introducer's AADHAAR and biometrics will be obtained by the enroller by way of attestation
- The applicant will be eligible for AADHAAR only if the introducer details are authentic and the applicants biometrics pass the test of de-duplication

## OBJECTIVES OF AWARENESS & COMMUNICATION STRATEGY

The broad objectives to the Awareness and the Communication Strategy for UIDAI are :

1. Complete coverage' Ensure communication reaches each- resident of India
2. Understanding AADHAAR: Ensure all residents understand what AADHAAR is, what benefits it can provide to people and how it will be used going ahead.
3. Understanding the AADHAAR process: Ensure residents understand the AADHAAR enrolment process, how and when can they get their AADHAAR and are familiar with the grievance handling mechanism
4. Uniform understanding: Ensure the above-understanding is uniform and consistent across residents.
5. Mobilizing, people for enrolments Prepare the mind and the environment of the consumer to overcome mental barriers for enrolment and mobilize people to participate

6. Enroll and mobilize introducers : introducers are integral enablers of inclusion and they would need to be accordingly made aware and enrolled in the process.
7. Sustain demand : Reassure residents in the first few experience on usage of AADHAAR and amplify positive experiences to further create and sustain demand on an ongoing basis.

//TRUE COPY//

IN THE SUPREME COURT OF INDIA

## CIVIL ORIGINAL JURISDICTION

I.A. NO.      OF 2015

IN

WRIT PETITION (CIVIL) NO. 37 OF 2015

**IN THE MATTER OF :**

Mathew Thomas

.... Petitioner

## Versus

Union of India and others

## ....Respondents

**APPLICATION FOR CONDONATION OF DELAY IN  
FILING THE REPLY/COUNTER AFFIDAVIT**

To

The Hon'ble the Chief Justice of India and  
His Companion Justices of the Supreme  
Court of India at New Delhi

The humble Application of the Respondent No.1 abovenamed

**MOST RESPECTFULLY SHOWETH :**

1. That this Hon'ble Court vide order dated 16.03.2015 passed the following order :-

"....Pleadings be completed before the end of April, 2015.

All the parties are at liberty to file any further affidavit or documents, if they so wish."

2. That in compliance of the aforesaid order of this Hon'ble Court, the Hon'ble Finance Minister on 19.03.2015 approved the proposal of filing of unified Counter Affidavit by DBT Mission on behalf of the Respondent Nos. 1 to 7 in the above mentioned writ petition.

3. That all the Respondents and other department/NCT of Delhi were requested to furnish inputs on relevant paragraphs. First meeting with the Respondents No.1 to 7 was held on 15.04.2015 followed by meeting with the officials Unique Identification Authority of India (UIDAI) on 27.04.2015. Thereafter, the draft counter affidavit was discussed with the Respondents No.1 to 7 on 05.05.2015 and upon vetting the matter by the competent authority, the same was finalized today, i.e. 13.05.2015.

4. That for the reasons aforesaid a short delay has caused in filing the counter affidavit in the above matter and the Respondent No.1 submits that the same is neither intentional nor deliberate but has been caused due to the reasons mentioned above which are totally beyond the control of the Respondent and the

same may kindly be condoned in the interest of justice.  
This application is made bonafide and in the interest  
of Justice.

**PRAYER**

It is, therefore, most respectfully prayed that this  
Hon'ble Court may graciously be pleased to:-

- (a) Condone the delay of 13 days in filing the counter  
affidavit in the above mentioned writ petition;
- (b) and pass such other or further order or orders as  
this Hon'ble Court may deem fit and proper in the  
facts and circumstances of the case and in the  
interest of justice.

AND FOR THIS ACT OF KINDNESS THE RESPONDENTS  
AS IN DUTY BOUND SHALL EVER PRAY.

DRAWN BY

FILED BY

KUMAR PARIMAL  
Advocate,

(D.S. MAHARA)  
ADVOCATE FOR THE RESPONDENTS

NEW DELHI  
DRAWN ON : 13.05.2015  
FILED ON: .05.2015



IN THE SUPREME COURT OF INDIA

CIVIL ORIGINAL JURISDICTION

I.A. NO.\_\_\_\_ OF 2015

IN

WRIT PETITION (CIVIL) NO. 37 OF 2015

**IN THE MATTER OF :**

Mathew Thomas

.... Petitioner

Versus

Union of India and others

....Respondents

**AFFIDAVIT**

I, Ghanraj Singh Shekhawat, Aged about 46 years, S/o. Late Govind Singh Shekhawat, presently posted as Director, DBT Department of Expenditure, Ministry of Finance, North Block, New Delhi, do hereby solemnly affirm and state as under :-

1. That I am the in the aforesaid official capacity well acquainted with the facts and circumstances of the case and as such competent to swear this affidavit on behalf of Respondent No.1.
2. That I have read the averments made in paras 1 to 4 of the Application for Condonation of Delay in filing the counter affidavit and I have fully understood the same. I say that the contents and purports made therein are all true and

correct to the best of my knowledge and belief derived from the records of the case.

DEPONENT

VERIFICATION

I, the deponent abovenamed do hereby verify that averments made in this affidavit are true and correct to my knowledge and belief. No part of it is false and nothing material has been concealed therefrom.

Verified at New Delhi on this the 13<sup>th</sup> day of May, 2015.

DEPONENT